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INDEX

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This index contains in a single alphabetical sequence the names of authors and subjects of all articles published in THE MODERN HOSPITAL during the six months covered by this volume. The following abbreviations indicate special departments in which articles appeared: Ab., abstract in Current Hospital Literature; Bk. Rev., Book Reviews; Corr., Letters to the Editor; Ed., Editorials; Q. and A., Queries and Answers.

A

Administrative Articles (See also Standardization)—
Administration, Hospital, Maintaining Balance in—Lyons..... 166
Air Control: the Next Great Step in Hospital Practice (Ed.)... 201
Air, Variability of the (Ed.)..... 293
Anesthetist on the Hospital Staff—Herb..... 98
Board of Trustees, Duties and Responsibilities of—Freiberg..... 15
Children's Dispensary, Organization on the Basis of Appointments for Patients—Park..... 185
Contagious Disease Hospitals, Management of—Richardson..... .....190, 379, 468
Contagious Diseases, Nursing Care of—Q&A..... 354
Crossed Infections and Methods for Prevention—Hoyne..... 396
Death Prevention, Some Practical Measures of—(Ed.)..... 403
Dispensary Service, Suggested Improvements in—Cohn..... 29
Dietitian as Coadjutor of the Physician—Greeley..... 132
Disinfection Apparatus—Dutch..... 530
Economies, Hospital, Renewed Need for (Ed.)—Wright..... 291
Efficiency in Tuberculosis Sanatorium Administration—Gammons 390
Executives, Hospital, Training Course for (Ed.)..... 401
Executives, Hospital, Training of—Bachmeyer..... 225
Fire Alarm Systems and Fire Drills in the Hospital..... 342
Fire Hazards in Hospitals, Again, the Question of—Marshall... 417
From a Standpoint of Business (Ed.)..... 400
Hospital Addition to Care for Private Patients Exclusively..... 501
Hospital Insurance, Various Forms of—Curtis..... 97
Is the Traditional Medical Course Indispensable for Successful Hospital Administration (Ed.)..... 401
Milk Supply, Safe, How to Insure in Hospital—Howland..... 258
Milk, Use of in Hospital—Graves..... 126
Power Plant Costs, Segregation of—Kimball and Pollock..... 441
Readjustments Which Training Schools and Nursing Departments are Facing—Logan..... 429
Statistical Department Hospital, Soul and Body of—Chapman.. 382
Spring Preparedness for Blankets and Pillows in Hospital—Fish 26
Social Worker as Clinic Executive—Lovell..... 153
Suggested Improvements in Dispensary Service—Cohn..... 29
Superintendent's Responsibility for Obtaining Post-Mortems—Castelaw..... 182
Teaching in the Hospital, How best organized—Dock..... 184
Administration, Hospital, Special Problems of—Collins..... 90
Again—The Question of Fire Hazards in Hospitals—Marshall..... 417
Agricultural Course for Hospital Patients at Base Hospital, Camp Sherman, Ohio..... 360
Air Control: The Next Great Step in Hospital Practice (Ed.)..... 201
Air, Variability of the (Ed.)..... 293
Allen, Charles E.—Poor Farm Goes Into the Discard..... 22
Aluminum Cooking Utensils, Pro and Con—Graves..... 247
American Army Hospital, Good Will in..... 496
American Association of Industrial Physicians and Surgeons—High Lights in the Recent Convention of..... 50
American College of Surgeons, Progress of Standardization Work of (Ed.)..... 42
American College of Surgeons, Hospital Standardization Investigations by (Ed.)..... 46
American College of Surgeons, Minimum Standard of the (Ed.).. 484
American Conference on Hospital Service Meets at Cincinnati.... 318
American Dietetic Association Makes Remarkable Growth..... 320
American Dietetic Association..... 220
American Dietetic Association, Tentative Program of..... 64
American Dietetic Association..... 220
American Hospital Conference, Problems Confronting the (Ed.)—Goldwater..... 198
The American Hospital Conference..... 219
American Hospital Association—
Bulletin of 77, 156, 205
Dr. A. R. Warner Chosen Executive Secretary of.....404, 410
First After-the-War Convention of..... 205
Future Tasks of—Warner..... 255
Institutional Membership in the (Ed.)—Webster..... 200
List of Personal Members, Institutional Delegates, State Delegates and Guests..... 314
Papers and Reports Presented at Cincinnati Meeting..... 330
Twenty-first Annual Convention..... 299
American Medical Association, 70th Annual Session of..... 53
American Nurses Association President Honored..... 349
American Nurse Decorated by French Government (Miss Margaret Mahoney, N. Y.)..... 193
American Protestant Hospital Association, Formation of..... 313
American Public Health Association—
Elects W. S. Rankin President (Ed.)..... 490
Annual Meeting of..... 506
American Red Cross: (See Red Cross.)
American Soldier Shows Interest in Retraining..... 230
Analysis of Disabilities, War Risk Insurance Bureau Reveals Interesting Data Concerning Disabled..... 76
Annual Meeting of American Public Health Association..... 506
Anesthetics, Training of Specialists to Administer—Oliver..... 181
Anesthetist, The, on the Hospital Staff—Herb..... 98
Architectural Articles—
Architect Replies to Criticisms on Blodgett Memorial Hospital (Corr.)..... 444
Carefully Studied Plan for Tuberculosis Sanatorium (Ed.)..... 44
Children's Convalescent and Recreation Home, The Neustadter Foundation—York and Sawyer—Goldwater..... 277
Construction, Hospital, Cross Plan in..... 76
Construction of Isolation Hospitals—Richardson..... 108
Construction of Maternity Ward, Interesting Experiment in (Ed.) 43
Consultant Criticizes Plan of Wallum Lake Sanatorium..... 424
Cottage Hospital, Santa Barbara Maternity Pavilion—Soule..... 14
Criticism and Reply (Ed.)..... 405
Fire Hazard in Hospitals, Question of—Crow..... 265
Isolation Hospitals, Construction of—Richardson..... 108
Architectural Articles, Continued—
Maternity Ward, Interesting Experiment in the Construction of (Ed.)..... 43
New York Diagnostic Clinic and its New Building—Weber..... 178
Riverside Sanatorium, Granite Falls, Minn.—Sund, Dunham, Dunton, Bosworth..... 17
Sealey, John, Hospital, Galveston, Tex.—Milne..... 24
Armstrong, Rose C.—Welfare Work That Spares no Expense..... 357
Army Hospital; See Base and Military Hospitals.
Army Medical Corps Keep Effective Nearly 94%..... 196
Army Rank for Nurses and Band Leaders (Ed.)..... 295
Army School of Nursing, Report of..... 348
Artificial Legs, Adjustable..... 81
Artificial Legs no Handicap on Ballroom Floor..... 239
Asepsis Number of Modern Hospital (Ed.)..... 44
Asepsis, Surgical, What is Meant by—Nelken..... 30
Asepsis, Surgical, Present-Day Meanin gof—Hertzler..... 23
Aseptic Nursing in American Hospitals—Richardson..... 10
Associations—
American Association of Industrial Physicians and Surgeons..... 50
American College of Surgeons.....42, 46, 484
American Conference on Hospital Service Meets at Cincinnati... 318
American Dietetic Association..... .....64, 140, 220, 320
(See American Hospital Association.)
American Hospital Conference.....198, 219
American Medical Association, 70th Annual Session..... 53
American Nurses' Association President Honored..... 349
American Protestant Hospital Association, Formation of..... 313
American Public Health Association.....490, 506
British Columbia Hospital Association Convention..... 249
Catholic Hospital Association of U. S. and Canada.....44, 58, 137
Chicago Dietetics Association..... 521
Home Economics Association, Conference of Institutional Managers..... 141
Minnesota Hospital Association Second Annual Meeting..... 54
Mississippi Valley Conference on Tuberculosis Holds 7th Annual Convention..... 426
National Conference of Social Work..... 60
National League of Nursing Education Meets..... 146
National Society for the Promotion of Occupational Therapy..... 140
National Tuberculosis Association..... 60
New Jersey Hospital Association, First Annual Meeting..... 141
New York Association for Medical Education..... 165
Attendants be Created, Shall a Group of Trained..... 513
Attendants, Hospital, Training of Ward..... 330

B

Babies Only in Fulham Hospital (London)..... 423
Babies, Hotels for..... 264
Babies treated in Eye Hospital..... 395
Bachmeyer, A. C.—The Training of Hospital Executives..... 225
Bacon, Mr. Asa S., to Edit Department (Ed.)..... 489
Bacteria, That Cause Infection, Fighting—Hall..... 27
Balkan States, Suffering Alleviated by American Red Cross..... 358
Balkans, Egg Market in the..... 341
Bandage, Non-Rubber Elastic..... 81
Dr. Barnes Replies to Consultant's Criticisms..... 424
Barnes Hospital, St. Louis, Record Room of—Green..... 32
Barnes, Harry Lee—Tuberculosis Hospital Constructed at Low Cost 371
Bartine, Oliver H.—Planning the Hospital with Reference to Future Development..... 408
Base Hospital, Camp Custer, Mich., Study of the Patients' Mess—Frey..... 280
Baths, Rules for Continuous Tub..... 317
Beautiful Music Brightens Christmas in the Hospital—Lash..... 480
Beautiful Memorial Hospital (Blodgett Memorial Hospital) (Ed.). 295
Begg, Jessie Cargill—Daddy Ten's Christmas..... 496
Bellevue Hospital, First Chinese Ambulance Surgeon at..... 230
Beyond the Ukase..... 493
Blankets and Pillows in the Hospital, Spring Preparedness for—Fish..... 26
Blind, Civilian, Profit by Soldiers' Experience..... 243
Blind No Longer Objects of Charity..... 340
Blind Soldiers Keep Posted on the War..... 131
Blinded Soldiers Club, Toronto, Canada..... 251
Blodgett Memorial Hospital, Grand Rapids, Mich., Architect Replies to Criticisms (Corr.)..... 444
Blodgett Memorial Hospital, Grand Rapids, Mich., Notable and Splendid Memorial Hospital—Hendrie.....268, 295
Blumenthal, Maurice—No Personal Interviews, Please (Ed.)..... 402
Board of Trustees, Duties and Responsibilities of—Freiberg..... 15
Board of Trustees, Hospital and Its (Ed.)..... 41
Board of Trustees, Education of (Ed.)..... 42
Board of Trustees, Staff Members on the (Q&A)..... 251
Bohemian Girls Learn Art of Cobbling..... 511
Bombay Technical School, Re-education in..... 428
Books Received for Review.....65, 253
Books, Two You Want to Know (Ed.)..... 126
Boston State Hospital—A Public Hospital Planned to Minimize Depreciation—Kendall..... 461
Boston Children's Hospital, Christmas a Gala Occasion in—Buckley..... 449
Bosworth, Robinson; Sund, E. H.; Dunton, Sara W.; and Dunham, E. H.—Riverside Sanatorium at Granite Falls, Minnesota..... 17
Boys, Jessie A.—Candy Dolls for Christmas Delight Children..... 521
Breast Feeding for Illegitimate Children, Special Need of..... 395
Bresnahan, John F.—Morale Work in the United States Army..... 168
Bringing the Christmas Spirit Into the Hospital—Leonard..... 473
British Columbia Hospital Association Convention..... 249
Buckley, Ida G.—Christmas a Gala Occasion in the Children's Hospital, Boston..... 449
Buffalo, Municipal Hospitals and Dispensaries, Teamwork in..... 229
Bulletin of American Hospital Association.....77, 156, 205

102015

C

Cambridge City Hospital Overcame Financial Handicap, How—Weber ... 452
Camp Sherman, Ohio, Base Hospital Course in Agriculture for Hospital Patients ... 360
Camp Custer, Mich., Base Hospital, Study of the Patients' Mess—Frey ... 280
Can Hospital Equipment be Standardized—Stevens ... 287
Candy Dolls for Christmas Delight Children—Boys ... 521
Canned Music, Wireless ... 274
Carefully Studied Plan for a Tuberculosis Sanatorium (Ed.) (Riverside Sanatorium, Granite Falls, Minn.) ... 44
Carry Over (Ed.) ... 127
Castelaw, Rush E.—The Superintendent's Responsibility for Obtaining Post-Mortems ... 182
Catholic Hospitals in the U. S. Out-Patient Departments and Social Service—O'Grady ... 392
Catholic Hospital Association New Bulletin (Ed.) ... 44
Catholic Hospital Association of U. S. and Canada ... 58, 137
Chapin, Mary Katherine—Some Small Communities and What Their Hospitals Mean to Them—Part I ... 374
Chapin, Mary Katherine—Some Small Communities and What Their Hospitals Mean to Them—Part II ... 455
Chapman, Frank E.—Soul and Body of a Hospital Statistical Department ... 382
Charitable Hospital Not Liable for Negligence of Employees (Q&A) ... 152
Chart Exhibits Arouse Keen Interest (Modern Hospital Exhibit) ... 336
Chastand, Emmanuel—How the Disabled May Write Quickly and Well ... 72
"Cheer Up, Bud; You Can Do the Same" ... 360
Chicago Dietetics Association ... 521
Child Feeding, Question of—Rose ... 435
Child Foremost Among Reconstruction Problems ... 447
Children's Convalescent and Recreation Home—The Neustadter Foundation, York and Sawyer—Goldwater ... 277
Children's Dispensary Organized on the Basis of Appointments for Patients—Park ... 101
Children's Hospital, Boston, Christmas a Gala Occasion in—Buckley 449
Children's Hospital, Boston, Half Century's Steady Growth in Usefulness ... 368
Children's Hostel and Maternity Home Combined ... 419
China, Needs and Problems of the Small Hospital in ... 248
Chinese Ambulance Surgeon, First, at Bellevue Hospital ... 230
Chinese Coolies in France Well Cared for ... 239
Christmas a Gala Occasion in the Children's Hospital, Boston—Buckley ... 449
Christmas at the Pennsylvania Hospital—Test ... 494
Christmas, Daddy Ten's—Begg ... 496
Christmas Delight Children, Candy Dolls for—Boys ... 521
Christmas Editorial—Peace on Earth, Good-Will to Men (Ed.) ... 485
Christmas Festivities at Lakeside Hospital, Cleveland—St. Clair ... 493
Christmas in the Hospital ... 509
Christmas in the Hospital, Beautiful Music Brightens—Lash ... 480
Christmas Joy, How Dietitian May Bring ... 517
Christmas, Soldiers in French Hospital Celebrate Peace—Robinson. 491
Christmas Spirit as Applied to Health in Modern Industry, The ... 527
Christmas Spirit Into the Hospital, Bringing the—Leonard ... 473
Cincinnati, American Conference on Hospital Service Meets ... 318
Cincinnati General Hospital, Its History and Present Aspect—Holmes ... 161
Cincinnait General Hospital, Handicraft Department, Hospital School and Convalescent Home—Poole ... 242
Cincinnati Hospitals, Some of the ... 224
Cincinnati Meetings; Problems Confronting the American Hospital Conference (Ed.)—Goldwater ... 198
Cincinnati—The "Queen City of the West" ... 222
Cinema Aid to More Careful Living ... 407
Civilian Blind Profit by Soldiers' Experience ... 213
Clark, A. Wayne; and Mathey, Gustave S.—Steam Sterilization of Material in Long Narrow Tubes ... 232
Cleveland, Christmas Festivities at Lakeside Hospital—St. Clair.. 493
Cleveland, Ohio, Hospital and Health Survey in ... 498
Cleveland, Process of Salvaging Used Gauze at Lakeside Hospital.. 87
Climate's Needs Met by Miami City Hospital (Corr.)—Harley ... 75
Clinics: See also Dispensaries: Out-Patient Service.
Clinic Executive, The Social Worker as—Lovell ... 153
Clinic, Metabolism, of the Royal Victoria Hospital, Montreal—Walker ... 170
Clinical Congress of Surgeons, Standardization Plans of ... 503
Club for Blinded Soldiers, Toronto, Canada ... 251
Cohn, Isadore—Suggested Improvements in Dispensary Service ... 29
College of Surgeons, Minimum Standard of The American (Ed.).. 484
Colleges Need Health Service for Students ... 364
Collins, Herbert O.—Special Problems of Hospital Administration.. 90
Colorado Fuel and Iron Co., Pueblo, Well-Developed Plan of Health Engineering ... 48
Combined Maternity Home and Children's Hostel ... 419
Coming of Compulsory Health Insurance ... 441
Communities and What Their Hospitals Mean to Them, Some Small—Chapin ... 455
Community Singing a Valuable Assistant ... 267
Concrete Value of Physical Examinations ... 52
Conference on Food and Nutrition ... 134
Conference of Institutional Managers of Home Economics Ass'n.. 141
Conley, Philip M.—Physical Reconstruction in a Tuberculosis Sanatorium ... 73
Conservation Through Correlation of Existing Agencies (Training of Nurses) ... 67
Construction, Hospital, Cross Plan in ... 76
Construction of Isolation Hospitals—Richardson ... 108
Construction of Maternity Ward, Interesting Experiment in (Ed.).. 43
Consultant Criticizes Plan of Wallum Lake Sanatorium ... 424
Consumption: See Tuberculosis.
Consumptives, Employment of ... 427
Contagious Disease Hospitals, Management of, Part I—Richardson 190
Contagious Disease Hospitals, Management of, Part II—Richardson 379
Contagious Disease Hospitals, Management of, Part III—Richardson ... 468
Contagious Diseases, Nursing Care of (Q&A) ... 354
Contaminated Articles, Nurses' Technique in Sterilizing and Disinfecting—Management of Contagious Disease Hospitals—Part III ... 468
Convalescent and Recreation Home for Women and Children, The Neustadter Foundation, York and Sawyer—Goldwater ... 277
Convalescent Home and Hospital School, Cincinnati General Hospital—Poole ... 242
Convalescent Rooms of Hospital, Pictures for (Q&A) ... 446
Cooking Utensils, Aluminum, Pro and Con—Graves ... 247
Cost-of-Living Investigation in the U. S.—Nash ... 63
Cottage Hospital, Santa Barbara, Maternity Pavilion at—Soule ... 14
County Infirmary Takes Place of Poor Farm—Allen ... 22
Course in Agriculture for Hospital Patients ... 360
Coyne, C. E.—An Industrial Clinic Without Records Except in Accident Cases ... 135
Crippled Blind, Machine-Knitting for the ... 428
Criticism and a Reply—A. (Ed.) ... 405
Cross Plan in Hospital Building (Q&A) ... 76
Crossed Infections and Methods for Prevention—Hoyne ... 396
Crow, William D.—Question of Fire Hazards in Hospitals ... 265
Curtis, L. R.—Various Forms of Hospital Insurance ... 97

D

Daddy Ten's Christmas—Begg ... 496
Dance Bridges Gap Between Present and Past ... 467
Davis—Michael M., Jr.; and Lovell, Bertha Chace—Preparing Statistics in Venereal Disease Clinics ... 252
Day Nursery, Opportunities of as Field for Social Service—Sargent 61
Deaf, Retraining the—Upham ... 359
Death Prevention, Some Practical Measures of (Ed.) ... 403
Jane Delano, R.N.—An Appreciation—Drew ... 155
Delegates, Members, and Guests at American Hospital Association Convention ... 314
The Delivery Room—A Hint from the Jungle ... 329
Dental Department of the University Hospital, Minnesota ... 39
Dental Work a "Godsend" ... 313
Denver, Opportunity School ... 298
Department of Dietetics ... 61, 132, 244, 350, 435
Department of Nursing ... 66, 143, 233, 346, 429
Department on Venereal Disease, Resume (Ed.) ... 489
Dietetics: See also Foods; Nutrition.
Dietetics Association, Chicago ... 521
Conference on Food and Nutrition ... 134
Cost-of-Living Investigation in the U. S.—Nash ... 64
Department of ... 61, 132, 244, 350, 435
Dietitian as Coadjutor of the Physician—Greeley ... 132
Dietitians' Importance in the Treatment of Disease—Ulrich ... 552
Dietitian May Bring Christmas Joy, How ... 517
Dietitians, News Notes of ... 65, 134, 247, 354, 440, 522
State Board Requirements in—Wells ... 353
Disabled: See also Crippled.
Disabled May Write Quickly and Well—Chastand ... 72
Disabled Soldiers, Serbia's Care for Her ... 429
Disabilities, Analysis of by War Risk Insurance Bureau ... 76
Disinfection Apparatus, Dutch ... 530
Dispensary and Out-Patient Work ... 153, 252, 362, 443
Dispensary, Children's, Organization on the Basis of Appointments for patients—Park ... 185
Dispensary Law Proves Factor for Good, Massachusetts ... 515
Dispensary, Noteworthy Measure for Promoting Efficiency (Ed.) .. 125
Dispensary, Plant, a Paying Proposition ... 52
Dispensary Service, Suggested Improvements in Cohn ... 29
Dispensaries: See also Clinics; Out-Patient Service; Venereal Dispensaries.
Dispensaries of Social Hygiene for the Prevention of Tuberculosis .. 134
Dock, George—How Can Teaching in the Hospital Best Be Organized? ... 184
Domitilla, Sister M.—The Hospital Head Nurse ... 346
Drew, Charles A.—Jane Delano, R.N.: An Appreciation ... 155
Dunham, A. B.; Sund, E. H.; Dunton, Sara W.; and Bosworth, Robinson—Riverside Sanatorium, Granite Falls, Minnesota ... 17
Dunton, Sara W.; Sund, E. H.; Dunham, A. B.; and Bosworth, Robinson Riverside Sanatorium, Granite Falls, Minnesota ... 17
Dutch Disinfection Apparatus ... 530
Duties and Responsibilities of the Board of Trustees—Freiberg ... 15

E

Economic Position of Nurses ... 508
Economies, Hospital, Renewed Need for (Ed.)—Wright ... 291
Editorials ... 40, 124, 198, 290, 399, 484
Education of the Board of Trustees (Ed.) ... 42
Educational Service U. S. General Hospital, Rahway, N. J.—Johnson ... 240
Efficiency in Tuberculosis Sanatorium Administration—Gammons ... 390
Egg Market in the Balkans ... 341
Ehrlicher, Charlotte—Public Health Nursing in New Jersey ... 512
Electricians in Demand (Federal Board Offers Training) ... 74
Employers Know Soldiers' Impairment ... 506
Employers of Labor Should Guard Against Reported Increase of Tuberculosis ... 52
Employment of Consumptives ... 427
Employment Service Bureau, Extension of Modern Hospital Service (Ed.) ... 203
Endowment Fund for Special Nurses for Ward Patients ... 349
Epileptic, One in Fifteen Hundred ... 429
Equipment, New Instruments and ... 81, 160, 447
Erion, Luella M.—Health Workers for Foreign Settlements ... 254
Executives, Hospital, Training Course for (Ed.) ... 401
Executives, Hospital, Training of—Bachmeyer ... 225
Extension of the Modern Hospital Service, Employment Service Bureau (Ed.) ... 203
Eye Hospital, Treating Babies in ... 395

F

Few Bright Ones from Probationers—A ... 406
Field Editor's Note Book, From the ... 39, 197, 482
Fighting the Bacteria That Cause Infection—Hall ... 27

Fire Alarm Systems and Fire Drills in the Hospital..... 342
Fire Hazards in Hospitals, The Question of—Crow..... 265
Fire Hazards in Hospitals, Again, The Question of—Marshall..... 417
The First After-the-War Convention of the American Hospital Association 205
First Aid in the West..... 427
First Annual Meeting of the New Jersey Hospital Association..... 141
First Chinese Ambulance Surgeon at Bellevue Hospital..... 230
First Large Conference of Occupational Therapists..... 344
First Memorial to American Women Who Made Supreme Sacrifice.. 338
First Training School for Nurses in Canada Hibbard (Corr.)... 445
Fish, Lina Stryker—Spring Preparedness for Blankets and Pillows in The Hospital..... 26
Fitzgerald, Alice Represents American Nurses in Europe—Robinson (Corr.) 75
Food and Nutrition, Conference on..... 134
Food Conveyor, Practical..... 133
Formation of American Protestant Hospital Association..... 313
Fracture and Orthopedic Table McKenna..... 448
Frank Statement of Some Striking Nursing Facts..... 347
Free Dental Clinics for Rural Schools. (Rural Health Problems).... 405
Free Public Hospital Movement. (From Canadian Medical Association Journal) (Ed.)..... 45
Freiberg, Albert H.—Duties and Responsibilities of the Board of Trustees 15
Frey, Charles N.—Study of the Patients' Mess, Base Hospital, Camp Custer, Mich..... 280
From a Standpoint of Business (Ed.)..... 400
Fulham Hospital for Babies Only, London..... 423
Future Tasks of the American Hospital Association, The—Warner.. 255

G

Galveston, Texas. John Sealey Hospital—Milne..... 24
Gammons, Herbert F.—Efficiency in Tuberculosis Sanatorium Administration 390
Garvin, Dr., Decorated for Services in France..... 230
Gauze, Used, Process of Salvaging at Lakeside Hospital—Cleveland 87
Goldwater, S. S.—The Cincinnati Meeting; Problems Confronting The American Hospital Conference (Ed.)..... 198
Goldwater, S. S.—The Most Serviceable Style of Hospital Windows (Q.&A.) 152
Goldwater, S. S. and York and Sawyer—
The Neustadter Foundation—A Convalescent and Recreation Home for Women and Children..... 277
Golf Links Which Took the Place of Drink (Abingdon Sanitary Mfg. Co., Abingdon, Ill.)—Lyons..... 51
Good Things in Store for 1920 (Ed.)..... 489
Good Will in Army Hospital..... 496
Granite Falls, Minn.—Riverside Sanatorium—Sund, Dunham, Dunton, Bosworth 17
Graves, Lulu—Aluminum Cooking Utensils, Pro and Con..... 247
Graves, Lulu—The Use of Milk in the Hospital..... 126
Gray, Carolyn E.—The Results of Organized Publicity in Interesting the Public in Nursing..... 237
Greeley, Hugh Payne—The Dietitian as Coadjutor of the Physician 132
Green, Elizabeth—The Record Room of the Barnes Hospital..... 32
Greetings from "Over There"..... 440
Growth of the Hospital Idea, The (Ed.)..... 124
Guests, Members, and Delegates at American Hospital Association Convention 314

H

Hackley Hospital, Muskegon, Mich., From the Field Editor's Note Book 483
Hair-Cut and Bath Campaign Launched in Poland..... 441
Hale Hospital, Haverhill, Mass..... 39
Half Century's Steady Growth in Usefulness, (Children's Hospital, Boston) 368
Hall, Frank J.—Fighting the Bacteria That Cause Infection..... 27
Hand Scrubbing, Hour Glass for..... 33
Handicapped Labor, Preparation of, for Absorption Into Industry 360
The Handicraft Department. The Hospital School and the Convalescent Home of the Cincinnati General Hospital—Poole.... 242
Harley, Lilah B.—Miami City Hospital Meets Climate's Needs (Corr.) 75
Haverhill, Mass.—Hale Hospital..... 39
Health: (See Also Public Health.)
Health and Modern Industry.....48, 135, 355, 441, 527
Health Engineering, Well-Developed Plan of..... 48
Health in Industrial World, Importance of Good..... 497
Health in Modern Industry, The Christmas Spirit as Applied to.. 527
Health Insurance, Compulsory, Coming of..... 441
Health Insurance, Some Hospital Problems of..... 355
Health Maintenance Demonstrated by Moving Picture Machine... 279
Health Ministry, Women are Members of..... 508
Health More Important Than Landscape..... 479
Health of the Worker, Practical Answer to Why It Pays to Protect 137
Health Problems That Affect Employer and Employee—Perkins.. 135
Health Service for Students, Crying Need of Colleges..... 364
Health Welfare, What the Working Man Thinks of..... 136
Health Workers for "Foreign" Settlements—Erion (Corr.)..... 254
Heck, Earl L.—The Walter Reed Military Hospital New Swimming Pool 173
Hendrie, Christine M.—Notable and Splendid Memorial Hospital... 268
Her "Croix de Guerre"..... 279
Herb, Isabella G.—The Anesthetist on the Hospital Staff..... 98
Hertzler, Arthur E.—Present-Day Meaning of Surgical Asepsis..... 23
Hibbard, M. Eugenie—First Training School for Nurses in Canada (Corr.) 445
High Lights in the Recent Convention of American Association of Industrial Physicians and Surgeons..... 50
Hill, Warren C.—The Winchester Hospital, Winchester, Mass., Meets Special Needs..... 92
Historic Hospital of Old Montreal (Hotel Dieu de St. Joseph)..... 296
Holmes, C. R.—The Cincinnati General Hospital: Its History and General Aspect..... 161
Home Economics Association, Institutional Managers Conference.... 141
Home Nursing Classes Started in Tenement Quarters..... 22
Home Service Aids Returned Soldier..... 467
Honor the Dead by Helping the Living..... 410
Hospice de Toury, Eure et Loir, France..... 197
Hospice des Vieillards Dreux, Normandy 197
Hospital Addition to Care for Private Patients Exclusively, New.. 502
Hospital and Its Board of Trustees (Ed.)..... 41
Hospital Associations: (See Associations.)
Hospital Activities of Church (M. E.) to be Co-ordinated..... 343
Hospital Bed Transformed Into Racing Car..... 417
Hospital, Beautiful Music Brightens Christmas in the—Lash..... 480
Hospital, Bringing the Christmas Spirit Into the—Leonard..... 473
Hospital Celebrate Peace Christmas, Soldiers in French—Robinson.. 491
Hospital, Christmas in the..... 509
Hospital Conference Possible Solution of Nursing Problem—Parsons. 434
Hospital as a Community Service—Young 227
Hospital Conditions on the East Coast of Sumatra..... 134
Hospital Facilities of Ohio, To Study..... 501
Hospital Fire Alarm Systems and Fire Drills..... 342
Hospital, Free Public, Movement (Ed.)..... 45
Hospital, Good Will in an American Army..... 496
Hospital Head Nurse, The—Domitilla..... 346
Hospital and Health Survey in Cleveland, Ohio..... 498
Hospital, Historic, of Old Montreal..... 296
Hospital Idea, Growth of (Ed.)..... 124
Hospital in Which Beauty and Sanitation Prevail—McCormack... 275
Hospital, Limb-fitting, at Roehampton..... 131
Hospital, Making the, A Place of Beauty for the Patient—Ludlow.. 365
Hospital and Medical Service, State of Ohio Investigates Its (Ed.).. 487
Hospital, Medical and Special Meetings.....53, 137, 249, 344, 426
Hospital, Occupational Therapy in the General—Robinson..... 524
Hospitals of the Old World and the New, A Comparison of—Robinson 260
Hospital Phone for Deaf Patients..... 160
Hospital Planned to Minimize Depreciation, A Public—Kendall..... 461
Hospital Practice, A Revolution in (Ed.)..... 484
Hospital Publicity, Motion Pictures for (Ed.)..... 488
Hospital, Rural from a Rural Point of View—Sampson..... 174
Hospital School and Convalescent Home of Cincinnati General Hospital—Poole 242
Hospital, Small in China..... 248
Hospital, St. Remy, Eure et Loir..... 197
Hospital Social Service—A Few Points..... 289
Hospital Social Work, Medical Social Diagnosis the Keynote of..... 362
Hospital Standardization Investigation by American College of Surgeons (Ed.)..... 46
Hospital Wards in Ancient Splendor..... 231
Hospital Which was Built to Endure. (The Rhode Island Hospital, Providence, R. I.)—Weber..... 83
Hospital World, H. E. Webster Joins Staff of the..... 508
Hospitals: See Also Base Hospitals. Children's Hospitals, City Hospitals, Contagious Disease Hospitals, Community Hospitals, County Hospitals, Field Hospitals, Industrial Hospitals, Insane, Hospitals for; Marine Hospitals Mental and Nervous Disease, Hospitals for; Red Cross Hospitals, Tuberculosis Hospitals.
Hospitals and the Community, Yesterday and Today (Ed.)..... 486
Hospitals as War Memorials (Ed.)..... 202
Hospitals as War Memorials—Lewis (Corr.)..... 253
Hospitals, Charitable Not Liable for Negligence of Employees (Q&A) 152
Hospitals for the University of Illinois..... 500
Hospitals Made of Tents..... 358
Hospitals Mean to Them, Some Small Communities and What Their Chapin 455
Hospitals of Cincinnati, Some of the..... 224
Hotel Dieu de St. Joseph—
Historic Hospital of Old Montreal..... 296
Hotels for Babies..... 264
Hour Glass for Hand Scrubbing..... 33
House Surgeon's Memories of Lord Lister—Thomson..... 1
How Cambridge City Hospital Overcame Financial Handicap—Weber 452
How Dietitian May Bring Christmas Joy..... 517
How Can Teaching in the Hospital Best Be Organized?—Dock..... 184
How to Insure a Safe Milk Supply in the Hospital—Howland..... 258
How National Tuberculosis Ass'n Expands Its Service—Pattison... 419
How to Prevent a Fuss (Ed.)..... 293
How to Take a Shower in France..... 274
Howland, Jos. B.—How to Insure a Safe Milk Supply in the Hospital 258
Hoyne, Archibald L.—Crossed Infections and Methods for Prevention 396
Hyun, Duk Syn—A Woman Medical Student in the Far East (Corr.) 75

I

Illinois, Out-Patient Departments in..... 443
Illinois State Hospital Nurses Complete Training..... 418
Imagination Helps, When a Vivid..... 527
Importance of the Dietitian in the Treatment of Disease—Ulrich.. 352
Importance of Good Health in Industrial World..... 497
Importance of the Laboratory in the Hospital (Ed.)..... 46
Improved Type of Lamp for Heat Applications..... 160
Improvements, Suggested, in Dispensary Service—Cohn..... 29
Industrial Accident Cases, What Member of the Staff is to Take.. 442
Industrial Clinic Without Records Except in Accident Cases—Coyne 135
Industrial Rehabilitation: (See Vocational Rehabilitation.)
Industrial Workers, Reclaiming the Physical Examination of..... 528
Industry, The Christmas Spirit as Applied to Health in Modern.. 527
Infectious Diseases: (See Contagious Diseases.)
Insane, Occupational Treatment for—Read..... 128
Institutional Membership in the American Hospital Association (Ed.)—Webster 200
Institutional Publicity, The Motion Picture Industry a Means for—Moss 497
Instruments and Equipment, New.....81, 160, 447
Insurance, Hospital, Various Forms of..... 97
Interesting Experiment in the Construction of a Maternity Ward (Ed.) 43
Ireland, Merritte W., Surgeon General, Honored by Royal College of Surgeons of Edinburgh..... 399

Isolation Hospitals, Construction of—Richardson..... 108
Is the Traditional Medical Course Indispensable for Successful Hospital Administration? (Ed.) 401
Italy Still Fighting Tuberculosis..... 172

J

Jacobi, Dr. Abraham (Ed.)..... 203
John Sealey Hospital, Galveston, Texas—Milne..... 24
Johnson, Franklin W.—Educational Service United States General Hospital, Rahway, N. J..... 240
Just an Orange..... 358
Just a Quiet Sunday Morning..... 340

K

Kalifornia Hospital, Kafeteria (California Hospital, San Francisco) 445
Kansas City, Mo., Research Hospital—From the Field Editor's Notebook 483
Keeping Up Morale at Home..... 231
Kendall, A. S.—A Public Hospital Planned to Minimize Depreciation 461
Kimball, D. D., and Pollock, Henry M.—Segregation of Power Plant Costs 411
Kinematic Surgery in Military Hospitals..... 196
Knowledge of First Aid Proves Invaluable..... 515

L

Laboratory in the Hospital. Importance of (Ed.)..... 46
Lack of Medical Help in Montenegro..... 530
Lakeside Hospital, Cleveland—
Christmas Festivities at—St. Clair..... 493
Process of Salvaging Used Gauze..... 87
Lamp for Heat Applications, Improved Type..... 166
Lash, DeWitt Durgin—Beautiful Music Brightens Christmas in the Hospital 480
Latchstring Out (Ed.) 45
League of Allied Hospitals (Edith Cavell and Marie De Page Memorial Hospital to Be Erected) (Ed.)..... 47
Leonard, Helen A.—Bringing the Christmas Spirit Into the Hospital 473
Lessons from Reconstruction Hospitals—Pechstein..... 194
Letters to the Editor.....75, 152, 253, 444
Lewinski-Corwin, E. H.—The Training of Medical Hospital Superintendents (Ed.) 40
Lewis, L. H.—Hospitals as War Memorials..... 253
Limb-Fitting Hospital at Roehampton, The..... 131
Lister, Lord, House Surgeon's Memories of—Thomson..... 1
Little Journeys to Places "Over There"—Robinson.....34, 118
Logan, Laura R.—Readjustments Which Training Schools and Nursing Departments are Facing..... 429
London—
Fulham Hospital for Babies Only 423
St. Thomas' Hospital..... 407
Lovell, Bertha Chace—The Social Worker as Clinic Executive.... 153
Lovell, Bertha Chace; and Davis, Michael M., Jr.—Preparing Statistics in Venereal Disease Clinics..... 252
Ludlow, William Orr—Making the Hospital a Place of Beauty for the Patient 366
Lyons, Barrow B.—Maintaining Balance in Hospital Administration 166

M

MacEachern, M. T.—A Survey of the Nursing Question.....70, 143
Maintaining Balance in Hospital Administration—Lyons..... 166
Making the Hospital a Place of Beauty for the Patient—Ludlow.. 365
Management of Contagious Disease Hospitals—Richardson—
Part I 190
Part II 379
Part III 468
Managing Editor, Modern Hospital's New (Ed.)—Chapin 295
Marking Machine, Improved..... 82
Marshall, Lloyd—Again—The Question of Fire Hazards in Hospitals 417
Massachusetts Dispensary Law Proves Factor for Good..... 515
Maternity Home and Children's Hostel Combined..... 419
Maternity Pavilion at Santa Barbara (Cottage Hospital, Santa Barbara)—Soule 14
Maternity Ward, Interesting Experiment in the Construction of (Ed.) 43
Mathey, Gustave S., and Clark, A. Wayne—Steam Sterilization of Material in Long Narrow Tubes..... 232
Maurer, James H.—What the Working Man Thinks of Health Welfare 136
Medical Course, Traditional, Indispensable for Successful Hospital Administration? (Ed.) 401
Medical Education, New York Association for..... 165
Medical Social Diagnosis the Keynote of Hospital Social Work—Poole 362
Medical Staff in 1633 341
Meeting of American Health Association, Annual..... 506
Members, Delegates and Guests at American Hospital Association Convention 314
Memorial, First, to American Women Who made Supreme Sacrifice 338
Memorial Hospital to Edith Cavell and Marie De Page to Be Erected (Ed.) 47
Memorial Hospital, Notable and Splendid—Hendrie (Blodgett Memorial Hospital, Grand Rapids, Mich.).....268, 295
Mental Patients, Wall Decorations for (Q.&A.)..... 76
Mercy Hospital, Springfield, Mass., from the Field Editor's Notebook 482
Metabolism Clinic of the Royal Victoria Hospital, Montreal—Walker 170
Methodist Episcopal Church, Hospital Activities of to Be Coordinated 342
Miami City Hospital Meets Climate's Needs—Harley (Corr.)..... 75
Mice, Ridding the Premises of (Q.&A.)..... 446
Military Hospitals, Kinematic Surgery in..... 196
Military Surgery in Relation to Civilian Practice..... 499
Milk Supply in the Hospital, How to Insure a Safe—Howland... 258
Milk, Use of in Hospital—Graves (Ed.)..... 125
Milne, Mrs. T.—John Sealey Hospital, Galveston, Texas..... 24
Minimum Standard of the American College of Surgeons, The (Ed.) 484
Minneapolis Dental Department of University Hospital..... 39
Minnesota Hospital Association (2nd Annual Meeting)..... 54
Mississippi Valley Conference on Tuberculosis Holds Seventh Annual Convention 426
Model Organization for the Prevention of Tuberculosis, A..... 530
Modern Hospital's New Managing Editor (Ed.)—Chapin..... 295
Modern Trained Nurse—McLeod 69
Montana Wants Public Health Service Nurses..... 68
Montenegro, Lack of Medical Help in..... 530
Montreal and the Next Annual Convention—Webster (Ed.)..... 400
Montreal, Historic Hospital of Old..... 296
Morale (Ed.) 203
Morale at Home, Keeping Up..... 231
Morale Work in the U. S. Army—Bresnahan..... 168
Moss, H. J.—The Motion Picture Industry a Means for Institutional Publicity 497
Most Serviceable Style of Hospital Windows (Q.&A.)..... 152
Motion Picture a Means for Institutional Publicity, The—Moss.... 497
Motion Pictures for Hospital Publicity (Ed.)..... 488
Moving Picture Machine to Demonstrate Health Maintenance..... 279
Municipalization of Hospitals, Advocates..... 508
Music Brightens Christmas in the Hospital, Beautiful—Lash..... 480
Music, Wireless Canned 274
Muskegon, Mich., Hackley Hospital—From the Field Editor's Notebook 483

Mc

McCombs, Carl E.—A Suggestion for the Practical Training of Public Health Nurses..... 88
McCormack, Mary E.—Hospital in Which Beauty and Sanitation Prevail 275
McKenna Fracture and Orthopedic Table..... 448
McLeod, Maud—The Modern Trained Nurse..... 69

N

Nash, Edith P.—Cost of Living in the United States..... 63
National Conference of Social Work..... 60
National League of Nursing Education Meets 146
National Society for the Promotion of Occupational Therapy..... 140
National Tuberculosis Association..... 60
National Tuberculosis Association Expands Its Service, How—Pattison 419
Needs and Problems of the Small Hospital in China..... 248
Nelken, A.—What Is Meant by Surgical Asepsis?..... 30
The Neustadter Foundation—A Convalescent and Recreation Home for Women and Children—York and Sawyer—Goldwater..... 277
New Bedside Table 160
New Blow at an Old Bugbear..... 443
New Hospital Addition to Care for Private Patients Exclusively.... 502
New Hospital Bulletin (Catholic Hospital Association) (Ed.)..... 44
New Instruments and Equipment.....81, 160, 447
New Jersey Hospital Association, First Annual Meeting of..... 141
New Jersey, Public Health Nursing in—Ehrlicher..... 512
New Method for the Training of Nurses, A—An Idea, Not an Institution—Walters 66
News Notes of Dietitians.....65, 134, 247, 354, 440, 582
New York Association for Medical Education..... 165
New York Diagnostic Clinic and Its New Building—Weber..... 178
New York Nursery and Child's Hospital, Hospital in Which Beauty and Sanitation Prevail—McCormack 275
No Personal Interviews, Please (Maurice Blumenthal, N. Y. C.) (Ed.) 402
Notable and Splendid Memorial Hospital (Blodgett Memorial Hospital, Grand Rapids, Mich.)—Hendrie.....268, 295
Noteworthy Measure for Promoting Dispensary Efficiency (Ed.)... 125
Noyes, Clara D., President of American Nurses' Association, Honored 349
Nurse, American, Decorated by French Government..... 193
Nurse, The Hospital Head Domitilla..... 346
Nurse, Recipe for Making Good..... 381
Nurse, The Modern Trained—McLeod..... 69
Nurses, American, Represented in Europe by Alice Fitzgerald—Robinson (Corr.) 75
Nurses and Band Leaders, Army Rank for (Ed.)..... 295
Nurses Are Nursed, Where 230
Nurses in Illinois State Hospitals Complete Training..... 418
Nurses, New Method for Training of—An Idea, Not an Institution—Walters 66
Nurses, Public Health, Suggestions for the Practical Training of—McCombs 88
Nurses, Public Health, to Be Furnished by Red Cross..... 80
Nurses, Ranyard Mission, Work of..... 421
Nurses, Special for Ward Patients..... 349
Nurses to Meet in Atlanta Next Fall..... 511
Nursing, Aseptic, in American Hospitals—Richardson..... 10
Nursing Care of Contagious Diseases (Q.&A.)..... 354
Nursing, Department of.....66, 143, 240, 346, 429
Nursing Departments and Training Schools—Readjustments Which They Are Facing—Logan..... 429
Nursing Facts, Striking, Frank Statement of..... 347
Nursing, Home Classes Started in Tenement Quarters..... 22
Nursing in New Jersey, Public Health—Ehrlicher..... 512
Nursing, National League of Nursing Education Meets..... 146
Nursing, Ohio Valley Hospital's School of..... 339
Nursing, Present-Day Problems in—Peterson..... 233
Nursing Problem, Hospital Conference Possible Solution of..... 434
Nursing Question, Survey of MacEachern 70, 143
Nursing, The Results of Organized Publicity in Interesting the Public in—Gray 237
Nursing School, Hospital, Shorter Hours Advocated..... 349
Nursing Service, Ohio Extends..... 433
Nursing Situation from the Public Health Point of View—Strong.. 509
Nursing, Training vs. Volunteer Service in..... 341
Nutrition and Food, Conference on..... 134

O

Occupational Therapists, First Large Conference of..... 344
Occupational Therapy: (See Industrial Rehabilitation and Vocational Reeducation.)
Occupational Therapy in the General Hospital—Robinson..... 524
Occupational Therapy, Vocational Reeducation, and Industrial Rehabilitation.....72, 128, 240, 359, 427
Occupational Therapy—
Blind Soldiers Keep Posted on the War..... 131
Crippled Blind, Machine-Knitting for the..... 428
National Society for the Promotion of..... 140
Occupational Treatment for the Insane—Read..... 128
Oglesby, Catherine—Out of the Grandstand into the Game..... 420
O'Grady, Rev. John—Out-Patient Departments and Social Service in Catholic Hospitals in the U. S..... 392
Ohio Extends Nursing Service..... 433
Ohio Investigates Its Hospital and Medical Service, State of (Ed.) 488
Ohio, To Study Hospital Facilities of..... 501
Ohio Valley Hospital's School of Nursing..... 339
Oliver, J. C.—The Training of Specialists to Administer Anesthetics 181
One-Armed Soldier Becomes Electrician..... 361
One in Fifteen Hundred an Epileptic..... 429
Opportunity School at Denver, The..... 298
Opportunities of the Day Nursery as a Field for Social Service—Sargent 61
Organization of Children's Dispensary on the Basis of Appointments for Patients—Park 185
Organization of Hospital in Small Town (Q.&A.)..... 446
Orthopedic Frame, Portable..... 447
Out of the Grandstand into the Game—Oglesby..... 420
Out-Patient Departments in Illinois..... 443
Out-Patient Departments and Social Service in Catholic Hospitals in the U. S.—O'Grady..... 392

P

Papers and Reports Presented at Cincinnati Meeting of American Hospital Association 330
Park, Edwards A.—A Children's Dispensary Organized on the Basis of Appointments for Patients..... 101
Park, Edwards A.—The Organization of a Children's Dispensary on the Basis of Appointments for Patients..... 185
Parsons, Sara E.—Hospital Conference Possible Solution of Nursing Problem 434
Patients' Mess, Study of the Base Hospital, Camp Custer, Mich.—Frey 280
Pattison, H. A.—How National Tuberculosis Association Expands Its Service 419
Peace on Earth, Good-Will to Men (Ed.)..... 485
Pechstein, L. A.—Lessons from Reconstruction Hospitals..... 194
Peking, School and Hospital at..... 502
Pennsylvania Hospital, Christmas at the—Test..... 494
Perkins, George Edward—Health Problems That Affect Employer and Employee 135
Peterson, Reuben—Present-Day Problems in Nursing..... 233
Phone, Hospital, for Deaf Patients..... 160
Physical Examinations, Concrete Value of..... 52
Physical Examination of Industrial Workers, Reclaiming the..... 528
Physical Reconstruction in a Tuberculosis Sanatorium—Conley.... 473
Pictures for Convalescent Rooms of Hospital (Q.&A.)..... 446
Pillows and Blankets—Spring Preparedness for, in the Hospital—Fish 26
Planning the Hospital with Reference to Future Development—Bartine 408
Plans for Rehabilitating Tuscany..... 479
Plant Dispensary a Paying Proposition..... 52
Pleasantness as a Basis of Treatment—Schram..... 442
Poland, Hair-cut and Bath Campaign Launched..... 441
Pollock, Henry M. and Kimball, D. C., Segregation of Power Plant Costs 411
Poole, Imogene—The Handicraft Department, The Hospital School, and the Convalescent Home of the Cincinnati General Hospital. 242
Poole, Imogene—Medical Social Diagnosis the Keynote of Hospital Social Work..... 362
Poor Farm Goes Into the Discard (County Infirmary Takes Its Place)—Allen 22
Portable Orthopedic Frame..... 447
Post-Mortems, Superintendent's Responsibility for Obtaining—Castelaw 182
Power Plant Costs, Segregation of Kimball—Pollock..... 411
Practical Answer to Why it Pays to Protect the Health of the Worker. (New Departure Mfg. Co., Bristol, Conn.)..... 137
Practical Food Conveyor..... 133
Practice, A Revolution in Hospital (Ed.)..... 484
Preparation of Handicapped Labor for Absorption Into Industry.. 360
Preparing Statistics in Venereal Disease Clinics—Davis..... 252
Present-Day Meaning of Surgical Asepsis—Hertzler..... 23
Present-Day Problems in Nursing—Peterson..... 233
President of American Nurses Association Honored. (Clara D. Noyes) 349
Prevention of Crossed Infections—Hoyne..... 396
Probationers, A Few Bright Ones From..... 406
Problems and Needs of Small Hospital in China..... 248
Process of Salvaging Used Gauze at Lakeside Hospital—Cleveland. 87
Progress of Standardization Work of American College of Surgeons (Ed.)..... 42
Proprietary Foods, Some of the Newer—Street..... 244
Prospectus for Workingmen's Hospital..... 358
Prosthesis, Working, for the Man With the Useless Hand..... 361
Providence, R. I.—Hospital Which Was Built to Endure, Rhode Island Hospital—Weber..... 83
Public Health Association Elects W. S. Rankin President, American (Ed.)..... 490
Public Health Nurses, Suggestions for the Practical Training of—McCombs 88
Public Health Nurses to be Furnished by Red Cross..... 80
Public Health Nursing in New Jersey—Ehrlicher..... 512
Public Health Point of View, Nursing Situation from the—Strong.. 509
Public Health Service Nurses Wanted in Montana..... 68
Public Hospital Planned to Minimize Depreciation, A—A. S. Kendall 461
Publicity, The Motion Picture a Means for Institutional—Moss.... 497
Publicity, Motion Pictures for Hospital (Ed.)..... 488

Q

Queries and Answers 76, 152, 251, 354, 446
Question of Child Feeding—Rose..... 435
Question of Fire Hazards in Hospitals, The—Crow..... 265
Quirinal Royal Palace, Rome, Converted Into Hospital..... 231

R

Rankin, W. S., President, American Public Health Association Elects (Ed.) 490
Ranyard Mission Nurses, Work of..... 421
Read, Charles F.—Occupational Treatment for the Insane..... 128
Readjustments Which Training Schools and Nursing Departments are Facing—Logan 429
Recipe for Making a Good Nurse..... 381
Reclaiming the Physical Examination of Industrial Workers..... 528
Reconstruction Hospitals, Lessons from—Pechstein..... 194
Reconstruction Problems, Child Foremost Among..... 447
Record Room of the Barnes Hospital—Green..... 32
Red Apple and Wisdom, A (Ed.)..... 291
Red Cross—
Cinema Aid to More Careful Living..... 407
Hair-Cut and Bath Campaign Launched in Poland..... 441
First Aid in the West 427
Home Nursing Classes Started in Tenement Quarters..... 22
Nine Red Cross Hospitals in Siberia..... 254
Out of the Grandstand Into the Game—Oglesby..... 420
Public Health Nurses to be Furnished by Red Cross..... 80
Red Cross Hospital No. 5, Auteuil, France—Robinson..... 34
Red Cross Stamps Out Typhus in Siberia..... 339
Suffering in Balkan States Alleviated by Red Cross..... 358
Women's Contribution to Red Cross..... 169
Reed, Walter, Military Hospital New Swimming Pool—Heck..... 173
Registry, Simple Form of, For Small Hospital (Q.&A.)..... 251
Renewed Need for Hospital Economies—Wright (Ed.)..... 291
Report of the Army School of Nursing..... 348
Reports and Papers Presented at Cincinnati Meeting of American Hospital Association 330
Research Hospital, Kansas City, Mo.—From the Field Editor's Note Book..... 483
Results of Organized Publicity in Interesting the Public in Nursing, The—Gray 237
Resume Department on Venereal Disease (Ed.)..... 489
Retraining the Deaf—Upham..... 359
Returned Soldiers Believe in Variety..... 523
Revolution in Hospital Practice, A (Ed.)..... 484
Rhode Island Hospital, Providence, A Hospital Which Was Built to Endure—Weber 83
Richardson, D. L.—
Aseptic Nursing in American Hospitals..... 10
Construction of Isolation Hospitals..... 108
Management of Contagious Disease Hospitals. Part I..... 190
Management of Contagious Disease Hospitals. Part II..... 379
Management of Contagious Disease Hospitals. Part III..... 468
Ridding the Premises of Mice (Q.&A.)..... 446
Riverside Sanatorium at Granite Falls, Minn.—Sund, Dunham, Dunton, Bosworth..... 17
Robinson, G. Canby—Occupational Therapy in the General Hospital 524
Robinson, Margaret J.—
Alice Fitzgerald Represents American Nurses in Europe (Corr.).. 76
Hospitals of the Old World and the New—A Comparison..... 260
Little Journeys to Places "Over There".....34, 118
Soldiers in French Hospital Celebrate Peace Christmas..... 491
Rose, Mary Swartz—Question of Child Feeding..... 435
Round Table Discussions, Topics for.....204, 226
Royal Victoria Hospital, Montreal, Metabolism Clinic of—Walker.. 170
Rules for Continuous Tub Baths..... 317
Rural Community and the Rural Hospital (Ed.)..... 403
Rural Hospital from a Rural Point of View—Sampson..... 174
Russian Refugees Aided by "Tyhus Train"..... 137

S

St. Clair, Lulu—Christmas Festivities at Lakeside Hospital, Cleveland 493
St. Louis, Record Room of Barnes Hospital—Green..... 32
St. Thomas's Hospital, London..... 407
Sampson, F. E.—The Rural Hospital From a Rural Point of View.. 174
San Francisco, California, Hospital Cafeteria..... 445
Santa Barbara, Maternity Pavilion at Cottage Hospital—Soule..... 14
Sargent, Nellie M.—Opportunities of the Day Nursery as a Field for Social Service..... 61
School and Hospital at Peking..... 502
Schram, C. F. N.—Pleasantness as a Basis of Treatment..... 442
Sealey, John, Hospital, Galveston, Texas—Milne..... 24
Second Annual Meeting of Minnesota Hospital Association..... 54
Segregation of Power Plant Costs—Kimball, Pollock..... 411
Selby, C. D.—Reclaiming the Physical Examination of Industrial Workers 528
Self-Rectifying X-Ray Tube..... 447
Serbians Again Making Rugs..... 472
Serological Water Bath..... 82
Seventieth Annual Session of American Medical Association..... 53
Shall a Group of Trained Attendants Be Created?..... 513
Shoe Repairing, Spanish Boy Learns..... 527
Shorter Hours in Hospital Nursing School Advocated..... 349
Should the Hospitals Strike?—Goldwater (Ed.)..... 290
Shower, How to Take in France..... 274
Siberia, American Red Cross Stamps Out Typhus..... 339
Siberia Has Nine Red Cross Hospitals..... 254
Simple Form of Registry for Small Hospital (Q.&A.)..... 251

Singing, Community, A Valuable Assistant 267
Social Hygiene, Dispensaries of, for the Prevention of Tuberculosis 134
Social Service Dietitian, Training of—Winslow 350
Social Service, Hospital Training for 172
Social Service, Opportunities of the Day Nursery as a Field for—Sargent 61
Social Service and Out-Patient Departments in Catholic Hospitals in the U. S.—O'Grady 392
Social Worker as Clinic Executive, The—Lovell 153
Soiled Linen, Washing Spots from (Corr.) 152
Soldiers' Impairment, Employers Know 506
Soldiers in French Hospital Celebrate Peace Christmas—Robinson.. 491
Some Hospital Problems of Health Insurance 355
Some of the Hospitals of Cincinnati 224
Some of the Newer Proprietary Foods—Street 244
Some Practical Measures of Death Prevention (Ed.) 403
Some Small Communities and What Their Hospitals Mean to Them—Part I. Chapin 374
Some Small Communities and What Their Hospitals Mean to Them—Part II. Chapin 455
Soul and Body of a Hospital Statistical Department, The—Chapman 382
Soule, Winsor—Maternity Pavilion at Santa Barbara 14
Spanish Boy Learns Shoe Repairing 527
Special Need of Breast-Feeding for Illegitimate Children 395
Special Problems of Hospital Administration—Collins 90
Spring Preparedness for Blankets and Pillows in the Hospital—Fish 26
Staff Members on the Board of Trustees (Q. & A.) 251
St: (See As If Spelled Saint.)
Staff Member To Take Industrial Accident Cases? 442
Standard of the American College of Surgeons, The Minimum (Ed.) 484
Standardization of Hospital Equipment, Question of—Stevens 287
Standardization, Hospital, Investigations by American College of Surgeons (Ed.) 46
Standardization Plans of Clinical Congress of Surgeons 503
Standardization of Tuberculosis Sanatoriums, The 58, 422
Standardization Work of American College of Surgeons, Progress of (Ed.) 42
State Board Requirements in Dietetics—Wells 353
State of Ohio Investigates Its Hospital and Medical Service (Ed.). 488
State Tuberculosis Hospital, Wallum Lake, R. I.—Barnes 371
Statistical Department, Hospital, Soul and Body of—Chapman 382
Steam Sterilization of Material in Long Narrow Tubes—Clark and Mathey 232
Sterilizing and Disinfecting Contaminated Articles, Nurses' Technique in—Richardson 468
Stevens, Edward F.—Can Hospital Equipment be Standardized? 287
Street, John Phillips—Some of the Newer Proprietary Foods 244
Strong, Anne H.—Nursing Situation From the Public Health Point of View 509
Study of the Patients' Mess, Base Hospital, Camp Custer, Mich.—Frey 280
Subjects for Round Table Discussion 204
Suffering in Balkan States Alleviated by American Red Cross 358
Suggested Improvements in Dispensary Service—Cohn 29
Suggestion for the Practical Training of Public Health Nurses—McCombs 88
Sumatra, Hospital Conditions on the East Coast of 134
Sund, E. H.; Dunham, A. B.; Dunton, Sara W.; and Bosworth, Robinson—Riverside Sanatorium at Granite Falls, Minnesota... 17
Superintendent's Responsibility for Obtaining Post-Mortems—Castelaw 182
Superintendents, Training of Medical Hospital—Lewinski-Corwin (Ed.) 40
Surgeon General Merritte W. Ireland Honored by Royal College of Surgeons of Edinburgh 399
Surgery in Relation to Civilian Practice, Military 499
Survey in Cleveland, Ohio, Hospital and Health 498
Survey of the Nursing Question, A—MacEachern 70, 143
Swimming Pool, Walter Reed Military Hospital, New—Heck 173

T

Table, New Bedside 160
Teaching in the Hospital Best Organized, How—Dock 184
Teamwork in the Municipal Hospitals and Dispensaries of Buffalo 229
Tentative Program of American Dietetic Association 64
Tents Made Satisfactory Hospitals 358
Test, Daniel D.—Christmas at the Pennsylvania Hospital 494
Texas Boys Overcome Handicaps 472
Things in Store for 1920, Good (Ed.) 489
Thomson, St. Clair—A House Surgeon's Memories of Lord Lister.. 1
Thousands Register for Vocational Training 33
The Three Crosses—Cooke 378
Topics for Round Table Discussions 226
Toronto, Canada, Club for Blinded Soldiers 251
To Study Hospital Facilities of Ohio 501
Trained Attendants Be Created, Shall a Group of? 513
Training Course for Hospital Executives (Ed.) 401
Training of Hospital Attendants—Ward 330
Training of Hospital Executive—Bachmeyer 225
Training for Hospital Social Service (Boston School of Social Work) 172
Training of Medical Hospital Superintendent—Lewinski-Corwin (Ed.) 40
Training of Nurses, New Method for, An Idea, Not an Institution —Walters 66
Training School, First for Nurses in Canada—Hibbard (Corr.) 445
Training Schools and Nursing Departments—Readjustments Which They are Facing—Logan 429
Training of Specialists to Administer Anesthetics—Oliver 181
Training the Social Service Dietitian—Winslow 350
Training versus Volunteer Service in Nursing 341
Treating Babies in Eye Hospital 395
Tuberculosis, Dispensaries of Social Hygiene for the Prevention of 134
Tuberculosis, Employers of Labor Should Guard Against Reported Increase of 52
Tuberculosis Hospital Constructed at Low Cost—Barnes (State Tuberculosis Hospital, Wallum Lake, R. I.) 371
Tuberculosis, Italy Still Fighting 172
Tuberculosis Leads, War Risk Insurance Bureau Statistics Show.. 231
Tuberculosis, Mississippi Valley Conference on, Holds Seventh Annual Convention 426
Tuberculosis, A Model Organization for the Prevention of 530
Tuberculosis Sanatorium, Carefully Studied Plan for (Ed.) 44
Tuberculosis Sanatorium, Efficiency in Administration of—Gammons 390
Tuberculosis Sanatorium, Physical Reconstruction in—Conley 73
Tuberculosis Sanatoriums, Standardization of 58, 422
Tuberculosis, U. S. P. H. S. Issues Warning Against 354
Twenty-first Annual Convention of the American Hospital Association 299
Two Books You Want to Know (Social Work and A Layman's Handbook of Social Medicine) (Ed.) 126
Typhus in Siberia, American Red Cross Stamps Out 339
"Typhus Train" Aids Russian Refugees 137

U

Ulrich, Henry L.—Importance of Dietitian in Treatment of Disease 352
U. S. General Hospital, Rahway, N. J. Educational Service—Johnson 240
U. S. Public Health Service Issues Warning Against Tuberculosis.. 354
University Hospital, Minneapolis, Dental Department of 39
University of Illinois, Hospitals for the 500
Upham, Elizabeth G.—Retraining the Deaf 359
Use of Milk in the Hospital, The—Graves (Ed.) 125

V

Value, Concrete, of Physical Examinations 52
Variability of the Air (Ed.) 293
Various Forms of Hospital Insurance—Curtis 97
Venereal Disease Clinics, Preparing Statistics in—Davis 252
Venereal Disease, Resume Department on (Ed.) 489
Vocational Rehabilitation for Crippled Soldiers—
American Soldier Shows Interest in Retraining 230
Disabled May Write Quickly and Well—Chastand 72
Education in Home Institutions ..... ???
Electricians in Demand 74
Fitting of Prosthetic Apparatus Important 428
Reeducation of Those Who Have Lost an Arm 345
Reeducation in Bombay Technical School 428
Rehabilitation of the Armless 427
Serbia's Care for Her Disabled Soldiers 429
Why Not Be a Miller, Bud? 444
Working Prosthesis for the Man with Useless Hand 361
Vocational Training, Thousands Register for 33

W

Walker, J. J.—Metabolism Clinic of the Royal Victoria Hospital, Montreal 170
Wall Decorations for Mental Patients (Q.&A.) 76
Walters, William A.—A New Method for the Training of Nurses.. 66
"War Beetle" Bed at Belfast, The 76
War Chest for Anti-Tuberculosis Work 502
War Memorials, Hospitals as—Lewis (Corr.) 253
War Memorials, Hospitals as (Ed.) 202
War Risk Insurance Bureau Publish Analysis of Disabilities 76
War Risk Insurance Bureau Statistics Show Tuberculosis Leads... 231
War Risk Insurance Bureau Publish Analysis of Disabilities 76
War Risk Insurance Bureau Statistics Show Tuberculosis Leads.. 231
Ward, Agnes S.—Training of Hospital Attendants 330
Ward Patients, Endowment Fund for Special Nurses for 349
Warner, A. R.—Future Tasks and Problems of American Hospital Association 256
Warner, Dr. Andrew Robert—Chosen Executive Secretary of American Hospital Association 404, 410
Washing Net, Home-Made 364
Washing Spots from Soiled Linen (Corr.) 152
Water Bath, Serological 82
Weber, J. J.—A Hospital Which Was Built to Endure 83
Weber, Joseph J.—How Cambridge City Hospital Overcame Financial Handicap 452
Weber, J. J.—The New York Diagnostic Clinic and Its New Building 178
Webster, H. E.—Institutional Membership in The American Hospital Association (Ed.) 200
Webster, H. E.—Joins Staff of The Hospital World 508
Webster, H. E.—Montreal and the Next Annual Convention (Ed.). 400
Welfare Work That Spares No Expense (Peoples' Gas Light and Coke Co.)—Armstrong 357
Well-Developed Plan of Health Engineering (Colorado Fuel and Iron Co., Pueblo, Colo.) 48
Wels, Helen M.—State Board Requirements in Dietetics 353
What is Meant by Surgical Asepsis?—Nelken 30
What Member of the Staff is to Take Industrial Accident Cases... 442
When a Vivid Imagination Helps 527
Where Color Line is Not Drawn 423
Where Nurses Are Nursed 230
Will Meet in Atlanta Next Fall 511
Winchester, Mass.—Winchester Hospital Meets Special Needs—Hill. 92
Winchester Hospital, The (Ed.) 126
Windows, Hospital, Most Serviceable Style of (Q.&A.) 152
Winslow, Emma A.—Training the Social Service Dietitian 350
Wireless Canned Music 274
Woman Medical Student in the Far East—Duk Syh Hyun (Corr.).. 75
Women's Contribution to Red Cross (Surgical Dressings) 169
Women's Convalescent and Recreation Home. The Neustadter Foundation—York and Sawyer—Goldwater 277
Women are Members of Health Ministry 508
Work of the Ranyard Mission Nurses 421
Working Prosthesis for the Man with a Useless Hand 361
Workingmen's Hospital, Prospectus for 358
Wright, Henry C.—Renewed Need for Hospital Economies (Ed.)... 291
Wright, Howell—First After-The-War Convention of the American Hospital Association 205

X

X-Ray Tube, Self-Rectifying 447

Y

York and Sawyer and Goldwater, S. S.—The Neustadter Foundation, A Convalescent and Recreation Home for Women and Children 277
Young, H. E.—The Hospital as a Community Service 227

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A HOUSE SURGEON'S MEMORIES OF LORD LISTER*

His Struggle Against Indifference and Criticism—His Nobility of Character and Faith in His Mission—Final Recognition and the Revolution of Surgery

BY SIR ST. CLAIR THOMSON, M.D., HOUSE SURGEON TO MR. JOSEPH LISTER IN 1883, LONDON, ENGLAND

AS we all know, Robert Browning lived a great part of his life in Italy, and died there. Many years before that event, another of our greatest poets, Percy Bysshe Shelley, was drowned off the coast of Leghorn and now lies buried in the Cimitero degli Allori, just inside the walls of ancient Rome. This was some time before Browning settled in Florence, and thus it came to pass that when, once in Italy, Browning made a friend who had known Shelley personally, he was so overcome by the thought that he was looking into the eyes of one who had actually gazed on Shelley, in his very habit as he lived, that he wrote of it in these lines:

"Ah, did you once see Shelley plain,
And did he stop and speak to you,
And did you speak to him again?
How strange it seems, and new!"

It has struck me that before the generation to which I belong passes away, it is a duty, as it is a very grateful task, for those who once saw Lister plain, to put on record some of our personal recollections and impressions of that great man, great, not only in that his name, as a scientific surgeon and a benefactor of humanity liveth for evermore, but in that he exerted on those who knew him an influence, a devotion, and an elevation of thought and soul that had in it a touch of inspiration. We have all had breathed into us a breath of the great spirit, in very varying degrees. In commenting on a paper of mine on "Shakespeare and Medicine," that well-known authority on Shakespeare, Sir Sidney Lee, said that Shakespeare, after God, had created most in the cosmic universe. I venture to say that, as an instrument in God's hands, Lister had wrought more for the relief of human suffering, for the security of human life, for the prevention of

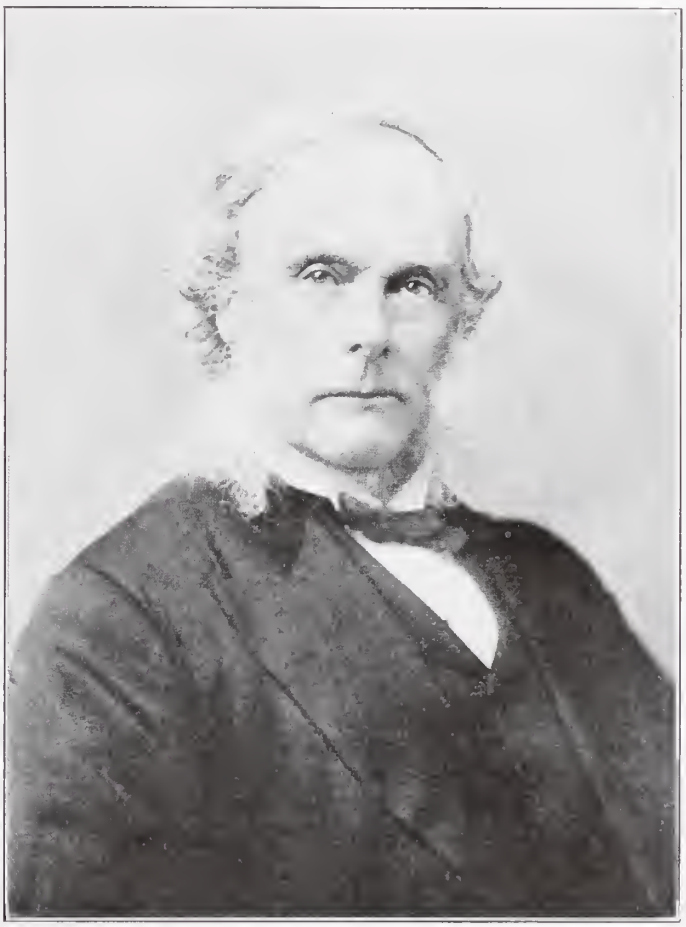


Fig. 1. Lord Lister.

* An address delivered before third-, fourth-, and fifth-year students at the Royal Victoria Hospital, Montreal, in May, 1919.

human anxiety, and the promotion of human happiness than any one man who has ever trod this earth. And, in addition, those who chanced to come near him caught glimpses of a spirit such as is seldom revealed to us.

"Such harmony is in immortal souls,
But while this muddy vesture of decay
Doth grossly close it in, we cannot hear it."

On Monday, October 1, 1877, I entered as a student at King's College, London, attracted there entirely by the great name of Lister, to whom my attention had been directed by a brother who had been his pupil in Glasgow. On that same first day of October, 1877, Lister, coming from Edinburgh, entered on his duties as professor of clinical surgery in King's College Hospital.

Educated at University College and a graduate of London University, Lister had already achieved what some would think the success of a lifetime, in that, though an Englishman by birth, he had migrated to Scotland and had there successively filled the chair of surgery in the two great universities of the North—in Glasgow from 1860 to 1869, and in Edinburgh from 1869 to 1877. He had been working at the process of healing in wounds and the best method of promoting it all that time; the so-called "antiseptic system" had been evolved in Glasgow and developed in Edinburgh. I say advisedly "so-called system," for, almost through his whole life, Lister had to fight hard in defense of the principles on which he based his methods of wound treatment; the methods employed were, of course, subject to constant revision, alteration, and improvement, and so could not sclerose into "a system," though the principles remained fixed. But the unthinking crowd, even in a learned profession like ours, shies at principles and always wants to pin the wings of thought down on to the cardboard of what the Englishman likes to call "practical methods." Hence Lister's treatment of wounds was frequently called the "carbolic method," or the "gauze and spray system." He once said to me that he expected to spend his life searching for an antiseptic that was not irritating. In these efforts, he moved from carbolic lotion to boracic, or made trial of corrosive sublimate, and then reverted to carbolic; or he saturated his gauze with carbolic acid iodoform, eucalyptus, or double cyanide of mercury. These seekings after truth were all causes for stumbling to the average individual, who loves finality and a ritual which he can adopt—no matter if he does so unthinkingly—so long as he can carry on with it indefinitely. This appreciation of general principles, so natural to the logical Latin mind of France and Italy, is strikingly wanting in the national character of England. As Matthew Arnold says, we have no sense of the idea. This is strange when we recollect that some of the greatest abstract thinkers have belonged to the British Isles—Hume, Hamilton, Locke, John Stuart Mill, Bain, Adam Smith, Herbert Spencer. But, on scrutinizing these names more closely, we cannot help noting that the majority of them indicate that their owners came from north of the Tweed. Certainly in Scotland Lister had a far larger and more devoted following of pupils than he ever gained in London. In Edinburgh the number of students who crowded the theater to attend his regular course of clinical surgery frequently exceeded four hundred, and foreign surgeons from all the countries of America and Europe, and even the outmost dwellers of Mesopotamia had been flocking for years to Glasgow and Edinburgh. A few, a very, very few young surgeons from London had ventured north to see and hear about this new antiseptic method of treating wounds, the two most notable being Lister's own nephews —Marcus Beck, afterward on the staff of University College Hospital, and Rickman Godlee, later on, president of the Royal College of Surgeons and the author of that biography of his uncle which every physician should read.

What induced Lister to leave the high position he had in Edinburgh, his wards of sixty to seventy beds in the Royal Infirmary, and these crowded classes of attentive students, to come to a small school in London where only twenty-four beds were allotted to him and where the students of all four years together (the curriculum was then a four-year one) amounted to only one hundred and forty-two? In Edinburgh the average annual entry of medical students was over one hundred and eighty; in King's College it was less than twenty-five. In London, instead of the university spirit of the northern capital, he was sure to be met with the insularity and parochialism which is perhaps more marked in London than in any other spot in the United Kingdom. His coming was not in order to have a larger field for private practice. Always blessed with a sufficiency of private means, Lister at no time courted the pecuniary rewards of practice, and he died a comparatively poor man. It was not to hunt for honors or distinctions; Lister, brought up a Quaker, thought little of such adornments. All who knew him are convinced that he accepted the invitation to come south simply and solely because he felt that on the larger and more central stage of the metropolis he could so demonstrate his work that he would the sooner fullfil his mission and win the whole world to accept his principles. In taking leave of his class in Edinburgh he ex-

pressed the pleasure that, under the risk of having his motives in leaving Edinburgh for London quite misunderstood, so large a number of Edinburgh students did really believe what was the truth—that it was only a sense of duty which had made him come to the decision to leave that school. He added that it was a wrench to leave a school in which he had received great kindness, and to take a cold plunge into what might prove to be a sea of troubles.[1]

He was indeed right. A cold and stormy sea of trouble was awaiting him. Lister returned from professorships in the Scottish universities to his own southern people, to the city of his birth and the country of his own form of faith. He returned to his own and his own received him not.

On Monday, October 1, 1877, as already recorded, I entered King's College, London, as a student and Joseph Lister entered it as a professor. But, in addition, on that day he also delivered the introductory address of the session 1877-1878. These inaugural orations have nearly died out; at that time they were almost universal. As a rule they were devoted to pointing out to freshmen the nobility, responsibilities and privileges of the profession to which they were about to devote themselves, and to urging them by hard work, simple living, and high thinking to make themselves worthy of it. They were, as a rule, friendly functions; the usual oration did not make too much demand on our thinking capacity, and we all came away cheered, as we always are, by a call to high endeavor and to make our reach exceed our grasp, "else what's Heaven for?" As a rule they were limited to the past and present students of each school.

But Lister, to most people's astonishment, opened his address by stating that he was going to record some experiments he had made—"during his holidays," forsooth—"to obtain some positive and definite knowledge of the essential nature of a class of phenomena which interest alike the physician, the surgeon and the accoucheur, viz.: the changes in organic substance which are designated by the general term 'fermentation.' "[2] This address was delivered from behind a table, covered with pipette, test-tube stands, glass flasks, tubes containing milk and blood, and the other paraphernalia required to demonstrate Lister's contention that neither milk nor blood had any inherent tendency to putrefaction and that if either of these fluids was drawn and preserved under what we should nowadays call "sterile conditions" it would remain free from putrefaction indefinitely. This is all accepted doctrine nowadays, when "all can raise the flower, now all have got the seed." But, although it was not so forty-one years ago, I need not deal further with the lecture, which can be read in full in the *British Medical Journal* of that year. What I would like to recall is that although the large theater in the college was crowded from floor to ceiling, and although Lister had a warm reception from former pupils and distinguished men of science, and although many surgeons had, on this opening day of the session, left their own schools to come and hear him, yet it was generally thought that the subject was inappropriate, that such an abstruse subject as lactic acid fermentation had no concern for a professor of surgery, that Lister did not seem the sort of teacher to show a student how to get through his examinations, that this man fiddling about with flasks and test tubes and talking about "putrefactive fermentation" could not be the "practical man" so dearly beloved in that Victorian generation, a generation which could not possibly have imagined that a medical man like Clémenceau could write novels and yet at seventy-five years of age be the leader of a great nation like France, or that a soldier like Foch might write books on war, be a lecturer in a military academy, and yet lead to victory the greatest army the world had ever seen, or that a college professor like Woodrow Wilson would be elected as their president by a nation of one hundred millions of practical people.

I sadly confess that at Lister's opening address we students were bored and we showed it. Forty-one years ago it was not thought to be discourteous or bad form to disturb a lecture or even to "kick up a row." Consequently we shuffled our feet and reminded the lecturer, sotto voce, that his hour was up and that it was tea time! When he was describing his investigations in the fermentation of milk, he had occasion to refer to the cowhouse and to cows, and then we booed, and, if he mentioned the dairymaid, we said "Tut, tut," and thought ourselves very funny fellows!

This first plunge at the college was certainly chilly, but it was at the hospital that Lister encountered his full sea of troubles. He had stipulated that he should be allowed to bring with him from Edinburgh four assistants already trained in his methods and attached solely to his service. This was a cause of offense; firstly, because it was held that any dresser could learn to employ carbolic lotion and gauze, just as previously he had learned to apply water-dressing or oakum; and, secondly, because in those days operations were so uncommon that a single house surgeon and one theater had previously sufficed for all the three senior surgeons of the staff. The house

1. Brit. Med. Jour., August 4, 1877, ii, 145.

2. Brit. Med. Jour., October 6, 1877, ii, 465.

surgeon whom he brought with him came from the Shetland Isles. His name will not be unknown to you as Sir Watson Cheyne, who later succeeded his master as professor in King's College Hospital, served as president of the Royal College of Surgeons, and, now retired from practice, is an active member of Parliament. The senior dresser came from this side of the Atlantic, Dr. John Stewart of Halifax, Nova Scotia, is one of the most affectionate pupils of the master, whom he has drawn in many telling pen pictures. From 1878, when I had last seen him acting as dresser in London, forty years passed before we met again. I found him a year ago following the flag in France, serving in his seventieth year as head of a Canadian hospital in Havre.

Vexatious opposition to Lister and his energetic though humane work came chiefly from the nurses. In those days the hospital did not control its own nurses; the nursing was, so to speak, leased out to a body which was more a religious sisterhood than a nursing staff. This consisted of the Sisters of St. John, an Anglican community much given to ritual, repression, frigid rules, the exaltation of what they thought the religious care of the patient above his medical well-being, and withal, with a mailed fist ever clinched and ready for any helpless student, resident, or even member of the staff, who showed any tendency to lése majesté. I could many a tale unfold of these far-off days and battles long ago between the nursing and the medical staff. I only mention them because Lister suffered more than any other member of the staff from their petty restrictions, their frigid rules, and their repressive formality. They made themselves particularly obnoxious to Lister as he gave more work than any other surgeon; he visited his wards daily, instead of twice a week; he had the boldness to show himself at the hospital after dinner, or even on a Sunday if a case gave him any anxiety; the technique of his dressings involved much washing-up and the spreading of mackintoshes to limit the effects of the clouds of watery carbolic spray in which we then worked; at least two hours daily were taken up by dressings, which Lister insisted on carrying out himself or seeing carried out under his own eye; there was much disturbance in the wards by his having patients carried or wheeled into the operating theater for his regular clinical demonstrations; in fact, he upset these pious ladies by disturbing the atmosphere they had created, an atmosphere which clearly suggested that medical men were allowed on sufferance in a hospital to do an operation or write a prescription, but that it was the nursing which took first place and that the all-important points were that the bed should be stiffly tidy, the patient's face shinily clean, and that he should say his prayers!

Worse than these two cold douches was what John Stewart describes as the colossal apathy, the inconceivable indifference, shown by the students and surgeons of London. The wards of most of the hospitals in England at that time stank with the hospital air of putrefaction. I remember the tin trays placed below an amputated stump to catch the dripping pus, and the frequency with which in the post-mortem room we saw the amyloid degeneration which indicated the patient's long and weary passage to the grave with hectic and surgical fever. Lister's wards were sweet; his dressings, when taken off, were free from putrefactive odor; they were handed round for confirmation, and I can remember the surprised and approving sniff with which the visitor—generally a foreigner—confirmed Lister's frequent pleased remark: "You will note, gentlemen, that the discharge is serous and quite sweet." Yet Londoners did not come to see this revolutionary change, to hear, to smell, and to be converted.

In Edinburgh his class frequently numbered four hundred students; in London some ten to twenty might turn up, but these gradually fell off. I have heard a carefully prepared, thoughtful, philosophic lecture, one which helped to lay the very foundation of a physiological understanding of our work, delivered by Lister to half a dozen men, and many a time I have seen him at work in theater or ward, accompanied only by his own suite. When complete this consisted of six dressers, three clerks (who must all have previously served as dressers), and his house surgeon. Each office lasted for six months. It was only the enthusiasts, or those who had some inkling that they were serving a great master, who cared to give six to eighteen months to receiving this precious instruction in the science and principles of surgery. The rest cared for none of these things; they were indifferent; they were utilitarians, who, with what the world might in its foolishness call "shrewd common sense," saw that Lister's teaching was no use to them, for he did not coach them in the subjects required for examinations nor hand round the tips which were to get the student through his examination. Lister noticed that though the London student has an affection for his school, he has none for the University of London where he graduates, or for the Royal Colleges where he takes his diploma, and hardly any for the city in which he studies. The Scotch student has more *esprit de corps* and more *feu sacré* in following a teacher or getting

to the root of a subject. (Strange that we have to employ French words to explain these un-English traits.) The English student is keener on securing a diploma with which to earn his living. But is he entirely to blame for this? In London much is sacrificed to the examination system, which encourages cramming, stifles any spirit of inquiry or love of knowledge for its own sake, and compels the teacher to limit his instructions to preparing the student to pass, not only certain examinations, but certain examiners. The complete separation of teacher from examiner also handicaps the student. It is not the student who is to blame; it is our faulty methods of teaching and examination. Ten years later Lister referred to his small classes at King's, after his crowded audiences at Edinburgh, as "a humiliating experience."

But, if students and London surgeons were apathetic and short-sighted over the revolution being wrought in surgery, it was not so with the foreigners. In the entrance hall of the old hospital there was a notice board in English, French, and German, forbidding smoking, thus:

Smoking forbidden
Il est defendu de fumer
Das Reuchen ist verboten

In later years many must have wondered when the necessity had occurred for this polygot announcement, for it was rare for any Frenchman or German to find his way there, and, if he did, he was so solitary and felt so much the repressive atmosphere of our misty island, that he could hardly have the hardihood to light an innocent cigarette. But it was different in the eighties. When I was Lister's house surgeon in 1883, foreigners poured in from the ends of the earth, crowded the entrance hall, and there, while waiting for the master, they would make the air thick with tobacco smoke. Twenty to sixty of them would fill the front seats of the lecture theater; indeed, I remember a time when the students complained of this and also of the fact that not infrequently Lister gave half his lecture in French or German, for he could make an extempore speech quite easily in either language. This complaint came round to Lister's ears and I remember how on a quiet day he took the opportunity to refer to it, saying that if the students showed as much enthusiasm as the foreign visitors he would see to it that they were not ousted from the best seats. Like all his little corrections, this was said most courteously and more in sorrow than in anger.

Among the visitors from overseas we made many interesting acquaintances. I remember an American surgeon turning up one day who told me he had been to Vienna to see Billroth but he did not consider him equal to a bully operator they had in Buffalo—the town from which the visitor came. He arrived at the hospital on Saturday just before lunch, and I told him Lister was not expected till two o'clock. He said he would wait, and asked if he could not look around the hospital in the meantime. I had the happy thought of turning him over to the secretary, whom he dragged all over the building, reducing that poor functionary to a limp mass before two o'clock. When the master arrived, our visitor said "Professor Lister, sir, I am told your wounds heal without suppuration and I've come all the way from Buffalo to see them." The ever-courteous professor said he was sorry, but that no cases required dressing that day; that the next day was a Sunday and that, as he had no class, he would be changing the dressings in the morning. The irrepressible visitor said, "No matter, I'll be there." And there he certainly was, on the Sunday morning. When all had been shown him he exclaimed, "Sir, I was like the doubting Thomas in the scriptures. I would not believe without seeing; and, like Thomas, I've seen and now I believe. Buffalo shall hear of this." Need I add that this easy reference, without a prefix, to a New Testament saint, and this breaking in on the Sabbath morning calm of the disciplined wards caused the caps of the high church Sisters of St. John to stand straight up from their heads? Lister beamed; he had no insular prejudices and always liked the expansive manners of foreigners.

How different to this chilly English reception of 1877 was that extended to him only two years later at the International Medical Congress at Amsterdam. *The British Medical Journal* of 1879 (vol. ii, page 453 thus describes how Lister was received by the whole congress with an enthusiasm which knew no bounds.

"When he stepped forward to open his address (which was delivered, with but few notes, in improvised French) the whole assembly rose to their feet, and, with deafening and repeated rounds of cheers, waving their hats and handkerchiefs, hailed the distinguished professor of King's College with acclamations renewed minute after minute, and time after time, as his name was again shouted forth by some grateful, enthusiastic acolyte. This remarkable scene—unprecedented, we imagine, in the history of medical science—continued for some minutes, until Professor Donders, the president, advancing with the distinctive grace and dignity for which he is remarkable, and taking Lister by the hand, as he stood overwhelmed with this magnificent ovation, obtained a moment's silence, and addressing him, said, 'Professor Lister, it is not only our admiration which we offer you; it is our gratitude, and that of the nation to which we belong.'"

Foreign surgeons attending the next Interna-

tional Medical Congress (it was in London in 1881) must have marvelled amongst themselves when they heard London and British surgeons attempt to cast doubt on the principles which Lister had evolved and belittle the results he had given by basing his practice on them.

But when the International Medical Congress again met in London in 1913, the light of Lister's good work was shining before men, although his body had been buried in peace. As we all know, congresses and such like events are commemorated by the issue of a medal. In monarchial countries it is a usual custom to engrave the head of the reigning sovereign on one side of the medal; and the medal of the International Medical Congress in London in 1881 bears on the obverse the effigy of Queen Victoria. But in 1913, it was felt in Britain that there was only one effigy worthy of being stamped on the medal of a congress in London and that was the head of Joseph Lister.

My readers will hardly believe me when I tell them that in my student days the surgeon of one of the largest teaching hospitals could always raise an appreciative laugh by telling anyone who came into the operating theater to shut the door quickly in case one of Mr. Lister's microbes came in. Nor can they credit it that, as late as the nineties of last century, another leading surgeon had the courageous ignorance to publish the results of an experiment he made in which the patients on one side of a ward were treated by the older methods—water dressings, poultices, lint, oakum, strapping, ointment, etc., and those on the other side with Lister's "antiseptic method." The fact that Lister would never publish his statistics was another cause of offense. How could he, when he was carrying out operations never attempted before in the history of surgery?

The first case in which Lister wired a fractured patella—I suppose the first case in the world in which a healthy knee joint was ever opened for such a purpose—was in 1877. When I was his house surgeon I had the honor of bringing together the first seven cases which he showed before the Medical Society of London in October, 1883.[3] Some of them had been recent and others old un-united fractures. All were successful. I remember the astonishment with which fellows of the society tried to feel the buried silver wire, and the surprise with which they heard that one patient had returned to his occupation as a bus conductor and was able to hop off and on his step and climb the bus stairs. But others were present who were aghast at the unwarrantable danger incurred in opening a healthy knee and so running the risk of ankylosis or of amputation, and even death. One surgeon said that if the next case died Lister should be prosecuted for malpractice, and another exclaimed that "C'etait magnifique mais ce n'est pas la chirurgie." In his reply Lister simply said that he considered that was *chirurgie* which saved people's lives.

The public had not heard his name then nor for many years afterward. I remember soon after starting practice, I thought I would strengthen my position in one family by mentioning—quite casually of course—that I had been house surgeon to the great Joseph Lister. "Yes," said the patient, "a great man; he must have made a pile of money out of Listerine!"

I remember, when house surgeon, telling Dr. Lionel Seale that I had just seen Lister resect a piece of rib in order to drain a pleural empyema. He was horrified and said I surely meant that Lister had simply tapped the pleura; and, when I assured him of the fact, he said these surgeons would not stop till they had taken out the heart or resected the medulla oblongata.

Ovariotomy results at King's College Hospital had been so disastrous that the governors had forbidden the staff to undertake it. Lister changed all this.

Slowly, very slowly, but surely, his work was winning its way to recognition. But even then, as his principles were being accepted, recognition was given grudgingly. One of his own colleagues, Prof. John Wood, said that Lister's fame came from Germany, and said that the "Germans were dirty people" but that this antiseptic system "was not really necessary in England." Efforts to depreciate him were made by saying that there was nothing in his methods except cleanliness, and late converts concealed their over-due repentance by rapturously embracing asepsis and vaunting its superiority over the "antiseptic system," as it was still called.

But all this was later. In these early years of Lister's advent a little personal recollection will illustrate how slowly his evangel spread, yet how courageously confident he was of his mission. I was standing beside him one day on the steps of the hospital in 1883 and waiting for his carriage to pull up, soon after the attack on him for daring to open a healthy knee joint. He began by quietly remarking that the day would surely come when the profession would accept the principles of his methods, "and," he added warmly, "if the profession does not recognize them, the public will learn of them and the law will insist on them." Then, in one of those serious, almost solemn, and always arresting little speeches, into which he occasionally and unexpectedly dropped, he placed his hand on my shoulder and added

3. Proceedings, London Medical Society, vii (1884), p. 8.

pathetically, "Thomson, I do not expect to see that day, but you may."

Within a decade from that day he had left King's College Hospital, but not before his mission had been fulfilled. We all know the story. Sir James Simpson, a colleague of Lister's in Edinburgh University, had made the assertion that "The man laid on the operating table in one of our surgical hospitals is exposed to more chances of death than the English soldier on the field of Waterloo."[4] Before the coming of Lister the death rate in major operations was from 25 to 40 per cent; in other words, the chances were that one out of every three or four patients would die. These figures included cases which were not necessarily serious on admission. Nowadays, the death rate is 2 to 3 per cent, and this is practically made up of cases in which the patient is admitted almost moribund, such as cases of advanced intestinal obstruction and of patients operated on *in extremis* with the faint hope of saving life.[5]

Dealing with the surgical revolution of the Victorian era, Treves writes: "It is a question if any change in human affairs, or any disturbance in human creeds, has ever been at once so striking, so thorough, and so unexpected as has been this stirring crisis of the healing art."[6]

Let us hearken to what one who was at no time his pupil said of Lister's work:

"Lister created anew the ancient art of healing; he made a reality of the hope which had for all time sustained the surgeon's endeavors; he removed the impenetrable cloud which had stood for centuries between great principles and successful practice; and he rendered possible a treatment which had hitherto been but the vision of the dreamer. The nature of his discovery—like that of most great movements—was splendid in its simplicity and magnificent in its littleness. To the surgeon's craft it was but 'the one thing needful.' With it came the promise of a wondrous future; without it was the hopelessness of an impotent past." (Treves.)

In 1892 Lister delivered his last lecture as he had to retire under the age limit of sixty-five, but he was invited by the council to continue his wards for another year and finally left King's College Hospital at the end of the summer session of 1893.

In 1897, the year of Queen Victoria's second jubilee, he was made a peer on New Year's Day, his peerage having been the first ever conferred upon a surgeon. In the following May an address and a dinner were offered to him by his old pupils, and I had the honor of being the secretary of that festival. No less than thirty old house surgeons and one hundred dressers were gathered together, some of them having come from the far ends of the earth. Many have told me that they have never seen such a manifestation of personal esteem and admiration as on that night when Lister's health was drunk with Highland honors. I took the opportunity of reminding the chief of his words to me on the steps of the hospital fourteen years previously, and I pointed out that he had not been imprisoned like Galileo, burnt at the stake like Giordano Bruno, or crucified like other pioneers of truth, but that we had both lived to see the day when his principles were universally accepted. Then, drawing a newspaper of the day from my pocket, I called his attention to the fact that the other part of his prognostication had been fulfilled, for this paper recorded the fact that a midwife in Germany had been sent to prison for manslaughter, as she had attended a confinement without providing herself with a proper antiseptic outfit!

In proposing Lister's health at a Royal Society dinner, Mr. Bayard, the American ambassador, exclaimed, "My Lord, it is not a profession, it is not a nation, it is humanity itself which, with uncovered head, salutes you."

What was the personality of this master of surgery? He was tall, well built, deep chested. He had a profusion of thick iron-grey hair, worn somewhat long; except for small side whiskers, he was clean shaven. I never saw him in any other pattern of collar or necktie except those seen in all his portraits. You will observe that the upright collar has the peaks turned down over a black silk bow tie. This was his one and only form of what the haberdasher calls "neckwear." His costume never varied; it was always a greyish pair of trousers and a frock coat made of the shiny black material called broadcloth, and nowadays seen only on undertakers and country hotel waiters. His hands were large and neither graceful nor delicate looking, yet he was a steady, firm, and deliberate operator. With the least exertion he perspired freely, and it was always one nurse's duty to stand behind him ready armed with a clean towel, to which he frequently turned during an operation to mop his streaming forehead. His voice was low and musical, with a rather attractive hollowness about it and with an occasional slight stammer. His manner was generally serious, but relieved by what Dr. John Stewart calls his "gentle, amused, and somewhat pensive smile." His manner to many had a certain aloofness about it and even his life-long disciple, Watson Cheyne, confesses that Lister always inspired him with a certain sense of awe. I myself always felt that his "soul was like a star, and dwelt apart." Yet he commanded not only veneration, respect, and admiration but a feeling of trust

4. The Works of Sir J. Y. Simpson, Edinburgh, Adam and Charles Black, 1871, ii, 289-392.
5. Cheyne, Sir William Watson, The Practitioner, lviii (June, 1897), p. 632.
6. Treves, F., The Practitioner, lviii (June, 1897), p. 632.

and devotion which could only be explained by the nobility and sincerity of his character. Though separated from him by the broad Atlantic for thirty-four years, a former pupil could write, "It is beyond my power to express the feelings of reverence and love I have for Lord Lister or to say how much his life has been to me." (John Stewart, 1912.) For my part, I can only say that no teacher, no friend, no man I have ever known has impressed me as Lister has done. To none of them do I feel the debt I owe to him for the example of his veracity of thought and word, his patience under persecution, his constancy in the pursuit of truth, his eagerness to instruct his pupils, his long-suffering with stupidity, his tenderness to the poor, and his gentleness to the sick and maimed. He was universally courteous and by treating others with respect, even his most violent critics, he appeared to be able to elicit the same consideration in return.

As an illustration of his devotion to the profession and the high esteem of which he considered it worthy, I will quote you a few sentences from an address he gave to the newly qualified students in a graduation address in 1878:

"If we had nothing but pecuniary rewards and worldly honors to look to, our profession would not be one to be desired. But in its practice you will find it to be attended with peculiar privileges, second to none in intense interest and rare pleasures. It is our proud office to tend the fleshly tabernacle of the immortal spirit, and our path, if rightly followed, will be guided by unfettered truth and love unfeigned. In the pursuit of this noble and holy calling I wish you all Godspeed."

When anything went wrong with a patient, and when a patient died, Lister was touchingly cast down and sorrowful. I remember an incident when he was working at the radical cure of hernia. Before his time, and particularly in King's College Hospital, efforts to effect this were attempted by a complicated method of subcutaneous wires. Well, Lister was going to try, probably for the first time in the world's history, the open method of a somewhat emphysematous subject. The twenty-four hours before the operation were very foggy. I went over the patient's chest carefully (having previously been house physician, I may remark); and, when Lister arrived, I reported that the man was very bronchitic and that he might like to defer the operation. After making some inquiries and hearing that the patient's pulse and temperature were normal, he decided to go on with it. The man died three days later from bronchitis and pulmonary edema. I do not, of course, quote this to emphasize my own perspicacity, but to illustrate how Lister acted under the circumstance. He selected as subject for his next lecture, "The medical care of surgical cases," narrated the history of the bronchitic man, and his deep grief that he had not paid more attention to the warning of his house surgeon. There are few professors who would have had such sincerity, courage, and magnanimity.

But his biographer relates that though he felt things very keenly at the time, a certain buoyancy soon restarted his equanimity and forward-looking temperament. He writes thus when on a holiday: "I have the happy faculty of being able to throw off all thoughts of work for the time being." Real idleness was not congenial to him. He fished, but as his biographer says, he was a diligent amateur but never an expert. His efforts at skating were more like a scientific pursuit, and he could do 8's and 3's, but of small dimensions. He took a fair share of vacation and, on his holidays, like all large-minded men I have met, he could be light-hearted and boyish, but complete idleness never appealed to him. On his holidays there were usually proofs to correct, or addresses to prepare; on the Continent, he practised and improved his very good French and German; during winter visits to Spain between 1887 and 1889, he acquired a certain amount of Spanish: he was devoted to walking and excursions; he was interested in botany and birdlife; and he could always fall back on a pocket-volume of Horace, Dante, or Goethe.

Another trait of his character was his invariable gentleness and sympathy with the humblest or roughest of his hospital patients. He seldom referred to a patient as "a case," but introduced his remarks with such kindly terms as "this poor fellow," or "this good woman," or "this little chap." A letter written by Lister to the house surgeon who preceded me, Dr. R. G. Lynam, now of Oxford shows this trait. The letter is entirely concerned with the interests of his students and a hospital patient, for whom he shows a touching consideration. He sent the letter to the hospital by special messenger, there being no telephone in those days. In reading his *ipsissima verba*, you will not "see Lister plain," but you will come into very close contact with his noble character. It reads as follows:

"My dear Lynam:

"I shall not be able to be at the hospital till three today. Will you, therefore, please have notices put up in college and hospital to the effect that I am not able to meet my class today, and also, if the empyema patient has telegraphed that he will be at the hospital today, will you please telegraph again to him putting him off till Wednesday, so as to avoid his exposing himself in vain this cold day?

"Yours very truly,

"Joseph Lister."

We are fortunate in possessing a perfect pen picture of the master in imperishable verse writ-

ten by W. E. Henley, who was at one time his patient in the Edinburgh Infirmary:

"His brow spreads large and placid, and his eye
Is deep and bright, with steady looks that still,
Soft lines of tranquil thought his face fulfill—
His face at once benign and proud and shy.
If envy scout, if ignorance deny,
His faultless patience, his unyielding will,
Beautiful gentleness, and splendid skill,
Innumerable gratitudes reply.
His wise, rare smile is sweet with certainties,
And seems in all his patients to compel
Such love and faith as failure cannot quell."

Lister lived most of his life and died a member of the Church of England, but he was brought up as Quaker and it has been well said of him that he belonged to a society the members of which called all men "Friend." (Sir Michael Foster.)

Lister was blessed with a loving and devoted wife. She was the daughter of Professor Syme, whom he had served as house surgeon in Edinburgh, and she appeared to have no other thought or interest beyond her husband. She not only loved and shielded him in every way, but entered intelligently into all his work and researches; helped him in his studies; worked in his laboratory; wrote his letters; and often, when I arrived at his house early in the morning, to go with him to a private operation, I would find Mrs. Lister preparing and checking off his instruments. In their pleasures, as in their work, they were united. They were inseparable companions on all his holidays, and in the numerous continental trips he loved to make. It was while on one of these in Italy that his wife died, after a very brief illness, at Rapollo, in 1893. They had no children, and after his wife's death Lister was a very lonely man.

His last years were saddened by slowly failing health. On February 10, 1912, he died at Walmer, a little fishing village on the English Channel, which looks across the Goodwin Sands to the shores of France.

He would have been buried at Westminster Abbey had he not left clear instructions that he wished to be laid to rest beside his wife in West Hampstead Cemetery. Before this took place, a public funeral service was held at Westminster Abbey on February 16, 1912, and the pallbearers were representatives of the Order of Merit, the Royal Society, the Royal College of Surgeons, the Universities of London, Edinburgh, and Glasgow, the Lister Institute, and King's College Hospital, which was represented by his first house surgeon and faithful disciple, Sir Watson Cheyne.

In the north transept of Westminster Abbey there is a marble medallion of Lister's bust, placed near to those of the great scientists Darwin, Stokes, Anderson, and Watt. It is extraordinarily like "the chief," as his students called him in Edinburgh.

Those who attended the impressive requiem in the Abbey will never forget the stately pomp and circumstance of a public funeral service, when not only the nation's representatives but delegates from all the world over manifested their mourning for a man who had made humanity his debtor for evermore.

"When the ear heard him, then it blessed him, and when the eye saw him it gave witness of him; he delivered the poor that cried, the fatherless, and him that had no one to help him. Kindness, meekness, and comfort were on his tongue. If there was any virtue, and if there was any praise, he thought on those things. His body is buried in peace, but his name liveth forevermore."

Fig. 2. Edinburgh infirmary, where much of Lister's great work was done.

ASEPTIC NURSING IN AMERICAN HOSPITALS*

Aseptic Nursing Successful Here as Abroad—Least Efficient in the Case of Measles and Chicken Pox—Contagious Disease Wards Necessary in Every General Hospital

By D. L. RICHARDSON, M.D., Superintendent Providence City Hospital, Providence, R. I.

ASEPTIC nursing was first introduced into America at the Providence City Hospital in 1910. This hospital was completed at that time for the treatment of contagious diseases. The

Fig. 1. Providence City Hospital, Providence, R. I., where aseptic nursing was first introduced into America in 1910.

planning of the hospital with the idea of employing medical asepsis was the work of Dr. C. V. Chapin. He had observed its use in both France and England and was convinced of its feasibility.

Patients suffering from infectious diseases are admitted to three buildings of two stories each. Two of the buildings are identical. There is a ward on each floor and there are separate rooms, containing from one to three beds, for about fifteen patients, and a convalescent room for from twelve to fourteen more. The first floor of one building is reserved for scarlet fever and the same floor of the other building for diphtheria. The second floors are isolation wards. The first floor of the third building consists of single rooms, patterned somewhat after the Pasteur Hospital. The second floor consists of rooms for from one to three patients each.

Since the opening of the hospital, patients have been accepted on the physician's diagnosis, and after a few days, any of them who are found not to be suffering from a contagious disease are sent home. There has been no selection of patients. The nursing has been done by pupils under a graduate head nurse, except in isolation wards E and F. In these wards, we have tried to keep a graduate force but this has not always been possible, and the most trusted pupils have been employed. The reason for this extra precaution is that into these wards have been admitted, as far as possible, measles, chicken pox, and smallpox during the early stage of the diseases at least. It is with measles and chicken pox that we have had two-thirds of all cross-infections.

The separate, or box-room, and the barrier, or bed-isolation, systems have been employed. We have not intended to treat measles and chicken pox in the early period of the diseases by the bed-isolation system. They are cared for in separate rooms.

During the last nine years, up to January 1, 1919, the following diseases have been treated in the hospital. This excludes 799 cases of advanced tuberculosis which have been treated in a fourth building; among whom there has never been a cross-infection. The report is based on 11,074 cases, suffering from the following diseases: Cerebrospinal meningitis, 11 cases; chicken pox, 111; diphtheria, 2,586; diphtheria with other infectious diseases, 111; diphtheria carrier, 87; erysipelas, 68; gonorrheal ophthalmia, 7; gonorrhea in other forms, 15; gonorrheal urethritis, 14; gonorrhea vaginal, 57; influenza, 308; influenza with other infectious diseases, 7; influenza with pneumonia, 49; laryngitis with negative cultures, 6; measles, 870; measles with laryngeal diphtheria, 9; measles with other infectious diseases, 112; epidemic meningitis, 17; mumps, 59; mumps with other infectious diseases, 2; no diagnosis,

Fig. 2. Isolation ward E of the Providence City Hospital, where careful aseptic nursing has resulted in a low rate of cross-infection.

62; no disease, 119; noma, 3; other diseases, 533; pneumonia, all forms, 11; acute poliomyelitis, 82; poliomyelitis with other infectious diseases, 3; rubella, 145; rubella with other infectious diseases, 6; scarlet fever, 2,141; scarlet fever with diphtheria, 7; scarlet fever with other infectious

*This is the third article in a series on the care of infectious diseases in hospitals. "The Care of Infectious Diseases in Hospitals" appeared in the April issue of The Modern Hospital, and "Medical Asepsis in French and English Hospitals" in May; the fourth, on the construction of infectious disease hospitals, will follow.

diseases, 159; septic sore throat, 8; congenital syphilis, 22; syphilis of the nervous system, 82; tonsillitis, 341; trachoma, 6; other forms of tuberculosis, 4; tuberculous meningitis, 20; typhoid fever, 6; typhus fever, 4; variola, 26; Vincent's

Fig. 3. Room in isolation ward E. Both the box-room and bed-isolation systems are employed, and measles and chicken pox in the early stages are always cared for in separate rooms.

infection, 17; whooping cough, 298; whooping cough with other infectious diseases, 4, making a total of 11,074.

All the smallpox patients, except five, were treated in a separate building in another part of the city. This smallpox hospital was abolished in 1914.

Among these 11,074 patients, 234 cases of cross-infection occurred as follows: chicken pox, 95 cases; measles, 67; scarlet fever, 34; diphtheria, 10; rubella, 11; whooping cough, 8; influenza, 5, and mumps, 4 cases, making a total of 234. This is a cross-infection rate of 2.1 percent.

It will be noted that of the 234 diseases contracted in the hospital, 162 or two-thirds, were of measles and chicken pox.

These figures include absolutely every case of disease contracted in the hospital, whether due to faulty technique or to infection which took place in a convalescent ward where one patient might infect several others before he could be removed. This latter event has occurred many times in the case of chicken pox and measles. In fact, nearly every one of such initial infecting cases has entered the hospital in the incubation period.

It is interesting to study cross-infection among patients in ward E, which is composed of single-bed rooms, and to which every kind of contagious disease has been admitted, at any stage, as well as cases for observation. This history covers a period of four years, during which a very careful record was kept of the number of patients and the number of transmissible diseases which they had in an infectious state while in this ward.

During this period, 753 patients were treated in this ward; of this number 72 were non-infectious. The remainder of the patients may be classified as follows, some patients having more than one disease: chicken pox, 94 cases; diphtheria, 131; diphtheria carriers, 69; erysipelas, 5; gonorrhea (all forms), 14; impetigo, 5; influenza, 4; measles, 234; mumps, 15; noma, 8; rubella, 30; scarlet fever, 144; scabies, 2; syphilis, 6; tonsillitis, 55; tuberculosis, 18; typhoid, 4; typhus, 3; variola, 4; Vincent's angina, 5; and whooping cough, 62, making a total of 912.

Among these 753 patients, the following cross-infections developed: chicken pox, 18 cases; diphtheria, 1; measles, 6; mumps, 2; scarlet fever, 4, making a total of 31. This is a cross-infection rate of 4 percent. Again it will be noted that over two-thirds were of chicken pox and measles.

A contagious pavilion was opened August 9, 1914, in connection with the University Hospital at the University of Michigan. Dr. Reuben Peterson, medical director of the hospital, was responsible for the construction of the pavilion and the introduction of aseptic nursing. He had three aims in view: to have a place where contagious cases could be taken from the general wards of the hospital to save long periods of quarantine; to take in students and members of the city suffering from contagious diseases; and to afford material for teaching purposes.

The pavilion is a one-story building with twelve rooms, 12 by 16 feet in size, each containing two beds. These rooms open upon a central corridor and also upon a 10-foot covered veranda which surrounds the building. Each room has a lavatory, the water being turned on by a knee lever, and the ward is furnished with utility rooms and equipment for sterilization of dishes, etc.

Fig. 4. Ward D, Providence City Hospital, where the bed-isolation system is employed. The card on the bed indicates the unit to which the patient belongs.

To Dr. David Cowie, I am indebted for the following data:

During three years and nine months, there have been treated in this ward 1,043 patients who suffered from the following diseases: diphtheria,

183 cases; diphtheria carriers, 88; erysipelas, 67; impetigo contagiosa, 11; influenza, 121; influenza and pneumonia, 38; infantile paralysis, 6; measles, 27; meningitis, 1; 168 cases for observation; parotitis, 37; pemphigus, 1; pertussis, 3; rubella, 38; scarlet fever, 122; smallpox, 47; varicella, 85, making a total of 1,043.

Among these patients, 31 cross-infections developed, as follows: diphtheria, 2 cases; diphtheria carriers, 5; erysipelas, 1; measles, 5; pertussis, 1; scarlet fever, 1; and varicella, 16, making a total of 31.

This is a cross-infection rate of 2.7 percent.

The contagious department of the Rochester General Hospital, Rochester, N. Y., has used aseptic nursing for four years, accepting all kinds of infectious diseases. During this time, 637 patients have been treated in this department.

The following cross-infections have developed: measles, 5 cases; scarlet fever, 2, making a total of 7.

This is a cross-infection rate of 1.1 per cent.

For the above data, I am indebted to Miss Mary L. Keith, superintendent of the Rochester General Hospital.

Four years ago the Mitchell Memorial Hospital of New London in their contagious ward adopted aseptic nursing.

During the last four years, 390 patients have been treated, and were ill with the following diseases: diphtheria, 155 cases; scarlet fever, 87; measles, 24; rubella, 8; tonsillitis, 10; smallpox, 22; miscellaneous, 5; erysipelas, 6; mumps, 20; whooping cough, 10; cerebrospinal meningitis, 14; infantile paralysis, 28; and chicken pox, 1, making a total of 390.

Fig. 5. Central corridor of the contagious pavilion of the University Hospital of the University of Michigan. The patients in the rooms opening on this corridor are as free from the danger of infection as those in a general hospital.

Among these patients there has been only one cross-infection, and that was smallpox. The smallpox patient, who was the source of this case, was unruly and went into the infected patient's room. During this same period, there have been only two cases of measles and two cases of diphtheria among the nursing force.

For this information, I am indebted to Dr. Ross E. Black of New London.

At the contagious ward of the St. Louis Children's Hospital, St. Louis, aseptic nursing has been used for some time. During a period from November 30, 1918, to April 1, 1919, the following diseases have been admitted: influenza, 99 cases; diphtheria, 78; scarlet fever, 28; measles, 2; tonsillitis, 8; epidemic meningitis, 1; pertussis, 2; miscellaneous, 5 cases, making a total of 223.

The following cross-infections have developed: scarlet fever, 1 case; diphtheria, 2 cases, and influenza, 1 case, making a total of 4.

This is a cross-infection rate of 1.8 percent.

Experience with aseptic nursing began at the Hartford Isolation Hospital July, 1914. Since that time, 2,202 patients have been admitted and among them 31 cross-infections have occurred, as follows: measles, 18 cases; chicken pox, 9; scarlet fever, 4, making a total of 31.

This is a cross-infection rate of 1.4 percent.

From a report by Dr. J. G. Wilson, of the Public Health Service, upon five years' experience at the hospital for immigrants at Ellis Island, is taken the following information:

During the period reported on, only eight wards have been used for contagious diseases. Two wards have been partitioned into rooms, containing from three to five cribs. In 1915, another ward was divided into one-bed units. In addition, in all other wards there is one room for isolation purposes. Each unit has a lavatory supplied with hot and cold water. The doors open into the room and are staggered, and each is supplied with a large glass window. There is also a window in the wall between rooms.

When children are out of bed, they are kept in the room by a removable gate. Each unit has the necessary equipment and furniture. All utensils and dishes are put in a creosote disinfecting solution before leaving the room.

In all, there are thirty-four units, each containing from one to five patients. The other wards are large and have accommodations for from fifteen to twenty-eight patients, depending on whether they are adults or children.

Practically all immigrants who are sick or suspected of being sick, are first admitted to the isolation room. This is necessary, for there is no way of knowing to what other diseases they have been exposed. The patients are admitted to the three isolation wards without discrimination as to disease. The nursing personnel is strictly trained in aseptic nursing.

During the five years reported on, 4,246 patients were admitted to the contagious wards. Of this number, 1,219 were either non-sick relatives or individuals who were either suspected of having a contagious disease or were contacts.

Out of this, 99 contracted a second disease, 83 of whom certainly contracted it in the hospital. To the number of certain cases were added 16 out of 31 cases, of which there was doubt as to whether they were contracted in the hospital or not. The 83 cross-infections were divided as follows: scarlet fever, 22 cases; diphtheria, 21; measles, 19; whooping cough, 14; rubella, 4; chicken pox, 2; mumps, 1, making a total of 83.

The cross-infection rate for the five years was 2.3 per cent. During 1915 and 1916 of this period, after more isolation units had been added, among 1,358 patients treated, only 19 contracted a second disease, a cross-infection rate of 1.4 per cent.

There are many other contagious hospitals in the United States and Canada where medical asepsis is employed with success. Among these are Evanston Hospital, Evanston, Ill., and St. Luke's Hospital, Jacksonville, Fla. I have been in touch with these hospitals and know that the cross-infection rate is low, although I have not been able to obtain exact data for this paper.

Considerable data has been presented to substantiate the practicability of medical asepsis, and all of it has been carefully tabulated from personal and printed reports, from the numerous hospitals referred to.

The conclusions to be drawn from these practical results are obvious. While aerial transmission of infection is not denied, it is of so little importance that all attention should be centered upon surgical cleanliness. It would seem as though measles and chicken pox might be exceptions, but of this one can not be too sure. The "infecting period" of these diseases is of very short duration, during the first few days of the disease, and it is not at all impossible that the means usually employed in hand-cleansing are not sufficient to free the hands from all infection. The transmission of these diseases has been very carefully studied in our isolation ward E. A patient in the room opposite to the infecting case was no more likely to contract the disease than one at the extreme end of the ward, perhaps on the same side of the corridor or in a room off the entrance hall.

Perhaps the most important result of being able to treat in the same ward or same building different infectious diseases is that it brings it within the financial means of small cities and towns to maintain a contagious ward or wards. Such communities could not possibly build and maintain a separate building or wards for the different diseases.

It also makes it possible to treat any kind of

Fig. 6. Isolation room in the contagious pavilion of the University Hospital of the University of Michigan.

infectious disease and not limit admission to scarlet fever, diphtheria, and possibly measles.

It also makes evident the safety of conducting contagious wards in connection with general hospitals where can be treated not only contagious diseases in the community, but also the many frank or suspected cases which develop in every general hospital. In fact, it is a very necessary addition to every general hospital of any size.

HOME INSTITUTIONS SELECTED

Training in Home State Colleges or Industrial Shops When Practicable, the Best Way, Says the Federal Board

The Federal Board for Vocational Education is training men in four lines of work, generally speaking, namely: Agriculture, industry, commerce, and the professions. The belief of the board, which it endeavors to live up to, is that disabled men should go back to their own states for their training, if possible. The board is using private commercial colleges for the commercial education of disabled men, because they are accustomed to dealing with individual students, with different degrees of education, who enter the course at irregular intervals. Land grant colleges are being used for agricultural training and, whenever practical, for engineering courses as well. Industrial trade schools and shops and plants of all kinds in many places are being used for the industrial work. The idea of the board is to keep the men contented during their period of training, and, as a rule, this is best accomplished by placing the men near their own people, and among familiar surroundings.

Approximately 110 soldiers of the Canadian forces are now on record as having been blinded at the front or having suffered loss of vision to an extent that prohibits their return to former occupations.

MATERNITY PAVILION AT SANTA BARBARA

Cottage Hospital Equips Building With Many New Features—Glassed-In Nursery for Babies in the Center of the Ward

By WINSOR SOULE, Architect, M. A. I. A., Director Cottage Hospital, Santa Barbara, Cal.

THE Cottage Hospital of Santa Barbara, Cal., has recently finished the construction of a new eighteen-bed maternity pavilion, the erection of which was made possible through the kindness of four of its directors. The pavilion is planned to take entire care of the maternity work of this institution, and is on the same level as the first floor of the main building, connected with it by a glassed-in corridor.

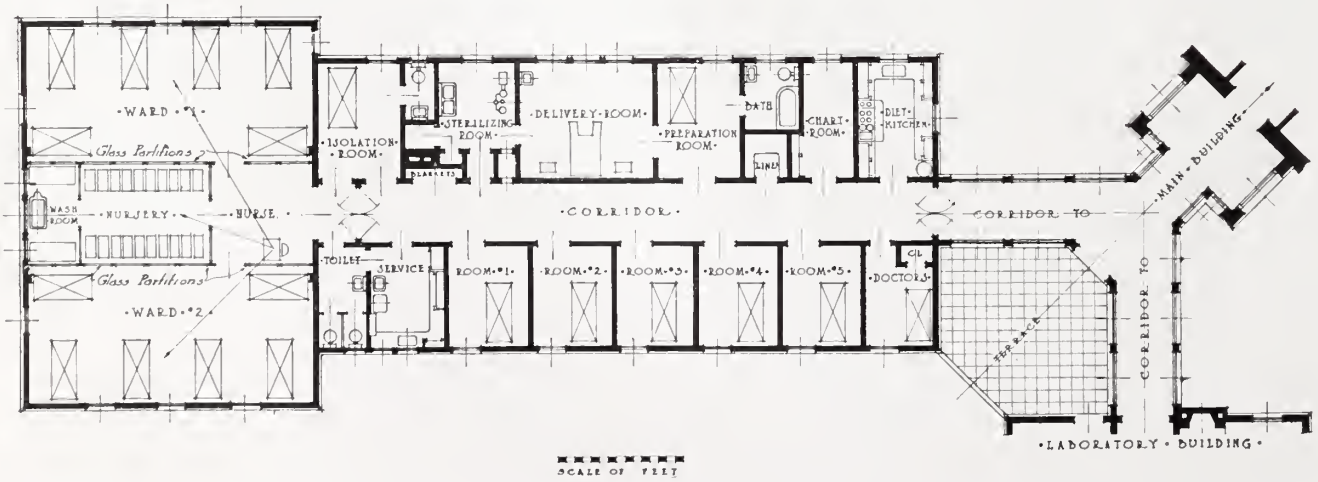
The building contains a modern, up-to-date delivery suite, consisting of preparation room with an adjoining bath, delivery room, and sterilizing room. The delivery room is accessible only through the preparation room or the sterilizing room, and is entirely isolated from the main corridor of the building; the walls of this suite are scientifically soundproofed by the latest and most approved methods.

Five private rooms of moderate size are provided on the south side of the pavilion, as well as an extra room where the doctors may sleep while waiting for cases. A commodious service room is placed centrally in the building and the general toilet is located next to this. Near the wards is an isolation room which is provided with its own toilet accommodations. This room will care for infected cases and those requiring special seclusion, and is reached either from the main corridor or from the wards.

The special feature of this pavilion is the arrangement of the wards and nursery. These rooms occupy a space approximately 35 by 45 feet, and the separate divisions consisting of wards 1 and 2, nurses' station, nursery and washroom, are divided from each other by partitions of clear glass which run from the floor to the ceiling, so that every portion of the building is visible at one time. The nursery, with its accommodations for twenty cribs, is placed in the center of the building between the two wards so that at all times, night or day, the babies are clearly visible to the mothers.

The washroom is likewise placed in the center at the end of the nursery, in such a way that every operation in the washing of the babies may be seen by the mothers in the adjoining wards. This provides a method of educating the mothers in the care of the babies which is invaluable in the case of ward patients. The partitions around the nursery are of double construction so that the crying of the babies is somewhat muffled in the wards, although no attempt has been made to cut off this sound entirely, as it is a part of the education of the mothers to learn that the baby must not be fed every time it cries.

The theory upon which this system is based was suggested by Dr. Alfred Baker Spalding of the Lane Hospital in San Francisco. Dr. Spalding in his extended maternity work evolved the theory that mothers would be more restful if they might see their babies at all times. He therefore partitioned off a corner of his maternity ward at the Lane Hospital and placed the babies in this enclosure. This proved so successful that he strongly recommended that the Cottage Hospital adopt this method of ward arrangement. Working on this hypothesis, with Dr. Benjamin Bakewell, obstetrician, I evolved the scheme of placing the glass nursery directly in the center between the two wards so that all mothers would have



Floor plan of the maternity pavilion of the Santa Barbara Cottage Hospital

their backs to the light and their faces toward the babies.

A special feature of this arrangement is the fact that friends and relatives may see the babies and the mothers from the nurses' station without disturbing either, and may often thus be prevented from entering the wards and the nursery. This arrangement also saves much handling of the babies in showing them to relatives.

The nurse from her station has control of the entire twelve beds and twenty cribs in the nursery and may keep all mothers and babies under observation at one time. The glass between the nursery and the nurses' station is of single thickness only, so that any undue amount of noise in the nursery may attract her attention.

The chart room is located next to the delivery suite and the diet kitchen is placed in the corner nearest the main building, as the food for patients is prepared in the main kitchen, delivered to the pavilion in a food cart, and kept hot on a steam table until served to the patients.

The building is of fireproof construction, equipped throughout in the most modern fashion, and should prove a great asset to the work of this up-to-date institution.

DUTIES AND RESPONSIBILITIES OF THE BOARD OF TRUSTEES

Their Position Analogous to a Board of Directors in a Commercial Concern—Co-operation With Staff and Superintendents the One Means of Success—A Method of Filling Vacancies in the Staff

By ALBERT H. FREIBERG, M.D., Cincinnati

IN discussing the functions of a board of trustees to the hospital, it must at once be realized that the very existence of such a body might well be considered ground for a difference of opinion. There are hospitals and hospitals, and there is the greatest possible variation in their fields of activity; this is true in still greater measure, however, with respect to the manner in which they derive their support and therefore with regard to those to whom they are responsible. It must surely be regarded as axiomatic in the beginning of such a discussion as this, that every hospital is to be looked upon as a collective enterprise established by a community, or a part of such, for the purpose of extending aid to the wounded or diseased who can not receive such aid as they require as efficiently without it. The need for the hospital may lie in the indigence of those whom it is intended to benefit, in which case we are dealing with the hospital as a charitable institution; on the other hand the hospital may be founded by persons of means in response to the accepted need for such institutions in the treatment of certain conditions of disease and injury, in order that medicine and surgery may be enabled to do the best which is possible, recognizing that only in a modern hospital properly equipped and efficiently conducted can this be done. There are, in addition, those institutions in which we find a combination of these conditions in degrees widely varying.

In any case, it seems to me that the board of trustees is to be looked upon as a means of accounting for a stewardship entrusted to them by a larger body; it is a reducing mechanism by which an ownership which is numerous and perhaps widely distributed seeks to provide for the efficient conduct of its business. In this respect there would seem to be no essential difference between the hospital and such large business enterprises as require specialized professional personnel for their successful operation. That such enterprises have financial gain as their final object does not militate against the comparison. The way to this result is the successful activity of the professional personnel; this is indispensable for the achievement of a production which is satisfactory not simply as to cost but equally as to quality and thereby as to marketability. The board of trustees is to be looked upon, therefore, as comparable to the board of directors of a manufacturing company whose output depends upon the work of men who are trained professionally; such a board proceeds to its task by the selection of a manager or superintendent. The superintendent will be chosen because of his training both professionally and as a manager, and his responsibility is twofold; to the board for the general results of the enterprise as a producer, and to his own professional staff for providing the equipment and conditions which are necessary to enable them to operate with efficiency.

The functions of the board of trustees would therefore appear to consist of the selection of an efficient superintendent, of the determination of

the general policy of the institution in order that it may, as a whole, have its proper relationship to those who are maintaining it; it should be incumbent upon them to produce the working capital or operating income and they should satisfy themselves through their superintendent and by personal observation that the institution is serving its defined purposes, that it is being conducted with the necessary economy and efficiency. Their activities with regard to the institution should be always through the intermediary of the superintendent; he should constitute their executive officer and should be clothed with sufficient authority to make him the master of the situation subject to rules and regulations carefully framed to meet the needs of the institution and the conditions under which it is being conducted.

Of very great interest to the physician and surgeon are two questions which arise in any discussion of the character and functions of a hospital board of trustees: 1. Should the medical profession be represented in the membership of such a board? 2. What should be the relations of the medical staff to the board?

The first question has arisen repeatedly in the conduct of hospitals because of difficulties which have been encountered and which, because of their technical nature or because they involved an intimate knowledge of the professional attainments of medical men seemed to invite the aid of members of the profession for their solution. For this reason it seemed wise to some that a hospital board should include one or more members of the medical profession in their number. The plan has often been tried and it cannot be said that experience must be made to argue in its favor.

The professional member or members being themselves at the same time members of the medical staff, there arises first of all an anomalous disturbance in the relationship of the employer and the employee; in the interest of discipline it is obviously undesirable for one to occupy both capacities. It is not to be assumed that one will himself be less in need of discipline or more likely to apply himself unfailingly to the discharge of his professional duty because he is one of the governing body. On the other hand, there is very likely to be a feeling of irritation on the part of the staff members who are not in this position, as they may feel that their colleague has an unfair advantage over them in being able to advocate any plan in which he has a personal interest; experience has, moreover, shown that this objection is by no means based on hypothetical grounds.

Membership in the board on the part of medical men who are not of the staff of the hospital is perhaps even more objectionable. Instances are not wanting in which such positions have been sought for the purpose of unfriendly partisanship toward one or more members of the staff, or for the purpose of advancing the personal interest of one or more who are members of the staff, or, of those who, not being members, would very much like to be.

In any case, membership of a physician in such a board is likely to involve the unpleasant and undesirable necessity of being looked to by his fellow members as a judge of the professional conduct of a colleague; this is a situation which had best be avoided. At the same time there can be no doubt that it will be frequently desirable or even necessary for the board to have the advice and assistance of one professionally trained and experienced. Should the superintendent be a physician, as he should be, such aid may be secured from him. On the other hand, the superintendent himself may be the subject of inquiry. Furthermore, it is surely of advantage that the sentiment of the staff should be always taken into account in shaping the policy of the institution; it is to be assumed that they are vitally interested in its welfare and successful conduct.

The solution of the difficulty would seem to lie in the definite organization of the staff as a body with stated times for meeting; it should be incumbent upon them to select one of their number as a delegate who should have the right and the duty to attend the regular meetings of the board. He should in this capacity have the rights of a board member with the exception of the right to vote, and should come to the board meetings instructed by the staff and thus enabled to speak for them. In this manner there may be provided such coordination of the activities of the two bodies as would insure the most effective and harmonious cooperation between them.

There remains to be discussed the relationship which should exist between the medical staff of a hospital and its board of trustees in respect to the appointment of members of the medical staff. It is obviously not suitable that the medical staff should be a self-perpetuating body. It is so generally conceded, and this is so undesirable that it is unnecessary to discuss the reasons therefor. We cannot do better than to abide by our simile, the board of trustees being likened to a board of directors. The power to employ or discharge must finally reside in them. They cannot, however, be capable judges of men's professional attainments; neither are they in position always to determine how men can work together agreeably. This knowledge is necessary, however, if there is to be developed that *esprit de corps* which is so greatly to be desired in a hospital staff. We have

here another difficulty which disappears when the staff and the board come together in a spirit of co-operation, each striving to do that which will be most acceptable to the other as well as most advantageous to the institution. It is inconceivable that the one thing can be accomplished without the other. Real success in hospital management implies that both should be accomplished. When staff appointments originate among laymen, influences come into play and precedents are created which are most troublesome and whose effect is unfavorably cumulative as years go on. Staff appointments should therefore originate in the staff by means of a mechanism definitely provided for. The following is suggested as a method which not only responds to the needs in a theoretical way but which has stood the test of trial. When a vacancy exists it is to be filled by the board of trustees from nominations presented by the medical staff. This should be true of all positions, both executive and subordinate, in the different hospital services. The nomination, in order to be so considered, should be proposed by action of the medical staff in open meeting. As a part of the above procedure, the director or head of service should have the privilege of expressing his choice of men to the staff. This should, however, not preclude the possibility of other nominations and their discussion by all who are present. If the board of trustees are unwilling to appoint any man who has been nominated by the staff, it should be their privilege so to state and it would then devolve upon the staff to present other nominations. If the procedure which has been suggested were carefully followed, it is unlikely that this would occur with any degree of frequency; on the other hand it would provide for a method so open and obviously fair that in the long run the most useful men would be found receiving appointments. Perhaps perfection cannot be claimed for it. In this respect it simply shares the character of every human arrangement.

RIVERSIDE SANATORIUM AT GRANITE FALLS, MINNESOTA

Maintained by Four Counties Under State Sanatorium Law—Includes Resident and Dispensary Service—Noteworthy for Beautiful Location and Practical Details of Construction

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THE Riverside Sanatorium of Granite Falls is one of the fourteen in Minnesota operating under the provisions of the law granting state aid for the construction of county sanatoriums. Thirty-three counties have availed themselves of the opportunity to construct sanatoriums, either alone or by grouping with other counties. The Riverside Sanatorium is maintained by four counties—Yellow Medicine, Las Qui Parle, Renville, and Chippewa, in which the sanatorium is located. The funds for running the institution are derived from three sources; first, the largest and main portion is raised by a tax which is levied each year by the respective county commissioners, who can tax up to two mills on the dollar of taxable property; second, all resident patients of these counties who can afford it pay at the rate of $7 a week, and all patients from other counties in the state pay $10 a week; third, for all free patients the state allows the sanatorium commission $5 a week.

Mrs. Sara W. Dunton, the superintendent, is a graduate of Roosevelt Hospital, New York City. In addition to her duties as superintendent, she acts as secretary of the sanatorium commission. This commission holds monthly meetings at the sanatorium to audit bills and act on any matters presented for its consideration. The staff contains four nurses; of these, one, a practical nurse, attends to the night duty; the day staff consists of a head nurse and two assistants, one of whom is a graduate and one a practical nurse.

The service rendered by this institution is of the highest type, both to its actual patients and to the counties which maintain it. The medical work is performed by experts in the diagnosis and treatment of tuberculosis. Their duties include the medical work at the institution and the establishment and maintenance of several rural dispensaries in the four counties. For a greater portion of the time since this institution was completed, one or more visiting nurses have been working through the community. By means of their efforts, special clinics have been held in many localities, and not a few unsuspected cases of tuberculosis have been discovered among children as well as adults. They also follow up and assist the cases discharged from the sanatorium from time to time.

The care given the patients of the sanatorium

is of the same high grade. Each patient receives a thorough physical examination on admission and every sixty days thereafter. Rounds are made twice daily by the doctor and the superintendent; nose and throat treatments are given nightly, and, at present, a class of sixteen are receiving tuberculin. The sanatorium is equipped to give pneumothorax treatment and to remove tonsils and adenoids. When ambulant patients

Fig. 1. Riverside Sanatorium, located on the Minnesota River at the foot of a slope which provides protection from the north wind in winter.

are in a condition to have graduated exercise, it is prescribed by the doctor and exercise charts are kept under the supervision of the nurses.

The sanatorium is located about two miles from the city of Granite Falls on the banks of the Minnesota River at a point which commands a good view of the surrounding country. Granite Falls was chosen as the location for the sanatorium because it affords the best railroad connections with all the counties in the district. The main county road runs through the entire property and almost parallel with the river. From this road down to the river, the land has a gradual slope, while on the other side of the road the ground rises abruptly and forms a ridge which protects the institution against the cold northerly winds in winter.

The site comprises thirty acres of land, of which the greater part is tillable. It is not the intention of the commission, however, to do any other farming than raising the necessary vegetables for the institution. In this it has been very successful, and the garden not only supplied the sanatorium with the daily consumption of vegetables but afforded large quantities which were canned for the winter's use. The water supply is taken from the river, but, as there were certain objectionable impurities in this water, it was found necessary to build a water purification and softening plant. Here the water is so thoroughly cleaned and softened that the supply ranks among the best in Minnesota institutions.

The institution at present has only one large patients' building with accommodations for forty-eight patients. The administrative offices and service rooms are also located here. In addition, there is a nurses' home, power plant and laundry building, water filtration plant, garage and workshop, and barn and cottage for the engineer.

The exterior walls of all new buildings are faced with a brown brick laid with wide raked joints. The brick below the first-story window sills is of a slightly darker shade than that used for the rest of the building. A one and one-half inch projection of this part of the wall added to the darker color gives emphasis to this line and establishes it as the base of the building. The exterior woodwork with the exception of the sash is painted a dark cream. This in combination with the tan color of the roofs gives a very simple and harmonius color scheme that blends well with the surroundings.

The building faces south with a garden entrance to the recreation room on this side; the main or business entrance is on the north side. A porte-cochere protects this entrance.

The construction throughout is fireproof, except the roof, which is wood frame covered with wood shingles. To protect the patients against any danger from a possible fire in the roof, the concrete ceiling slab of the top story has been built heavy enough to carry the load in case the roof should burn and fall. This type of roof construction was adopted to save money.

The power plant and laundry is located about a hundred and fifty feet from the main building. The lower part of this building, which is taken up by the power plant, is fireproof and has a reinforced concrete slab overhead. The superstructure of the laundry, however, is not fireproof, for the ceiling is of frame construction. The exterior walls are faced with brick to match the main building. The chimney is of reinforced concrete construction and is eighty-five feet high.

The present building, including site, equipment,

Fig. 2. Southern exposure of the Riverside Sanatorium. The long meadow before it slopes down to meet the river.

and architect's fees, cost approximately $115,000. The cost per cubic foot for constructing the main building and power plant, including plumbing, heating, and electric wiring was 21.3 cents.

There is a well-lighted and ventilated basement under the entire building which is plastered and has cement floors and base. Basement rooms under the service wing are used for storing kitchen supplies. A toilet room for the kitchen help, a fuel room for the kitchen and refrigerating plant are also located in this part of the basement.

Under the central portion of the building is located the sterilizer where all clothes for laundry as well as mattresses are sterilized. There are two rooms set apart for this work with the sterilizer extending through the partition separating them. The clothes are put into the sterilizer in one room, which is called the receiving room, and taken out in the other. In this way the sterilized clothes are kept from coming in contact with the infected.

The rest of the basement is taken up by storerooms, laboratory with dark room, morgue and autopsy room, trunk rooms, locker room for

Fig. 3. One of the patients' wards in the Riverside Sanatorium. The windows have three sashes so designed that they can be dropped into a pocket below the sill, turning the rooms into what are virtually porches.

patients' belongings that cannot be kept in their lockers on the upper floors, public toilets, and future cloak rooms to be used by patients coming to the dining room from the cottages when these are built.

As will be seen from the first-story plan, the general office is located on one side of the entrance lobby and the superintendent's or physician's office on the other, with a small examination room adjoining. On the west or administrative side are located also a combination head nurse's office and

Fig. 4. Interior view of the water purifying and softening plant of the Riverside Sanatorium. It is due to this plant that the water supply drawn from the river ranks among the best in Minnesota institutions.

drug room, one additional examination room, and a treatment room. A space is provided for an elevator, in case it should ever be found necessary to install one.

The portion of the first story located east of the main entrance is given up entirely to patients, except for the general office. A partition and door across the corridor separates this part of the floor from that already described. There are accommodations for nineteen patients, of whom ten are cared for in one large ward, six in a smaller ward, and the rest in private rooms. Here are also a diet kitchen equipped with refrigerator, cupboards, sink, sterilizer, and electric cooker; a utility room with a flushing rim porcelain slop sink, bed-pan flusher, and sterilizer; linen rooms; and a large patients' dressing room with lockers for all ward patients.

These two sides of the building are separated by the recreation room which is located directly opposite the entrance door. This is a large, well-lighted, cheerful room with a fireplace. Through the double pair of French doors connecting this room with the corridor, every person entering the institution must necessarily look directly into the well-furnished and cozy recreation room. The first impression of a visitor is therefore one of roominess and comfort. The room contains a piano and a victrola, and, on some of the holidays, entertainment is furnished here in the way of a card party, musicale, candy pull, or masquerade. The entire atmosphere of the place is made as homelike as possible.

The dining room is at the end of the main corridor and separated from it by large French doors. At each end of the room there is a group of five large windows. These, in addition to the windows on the west wall, give an abundance of light and air. A small room with two flushing rim cuspidors is located next to the dining room.

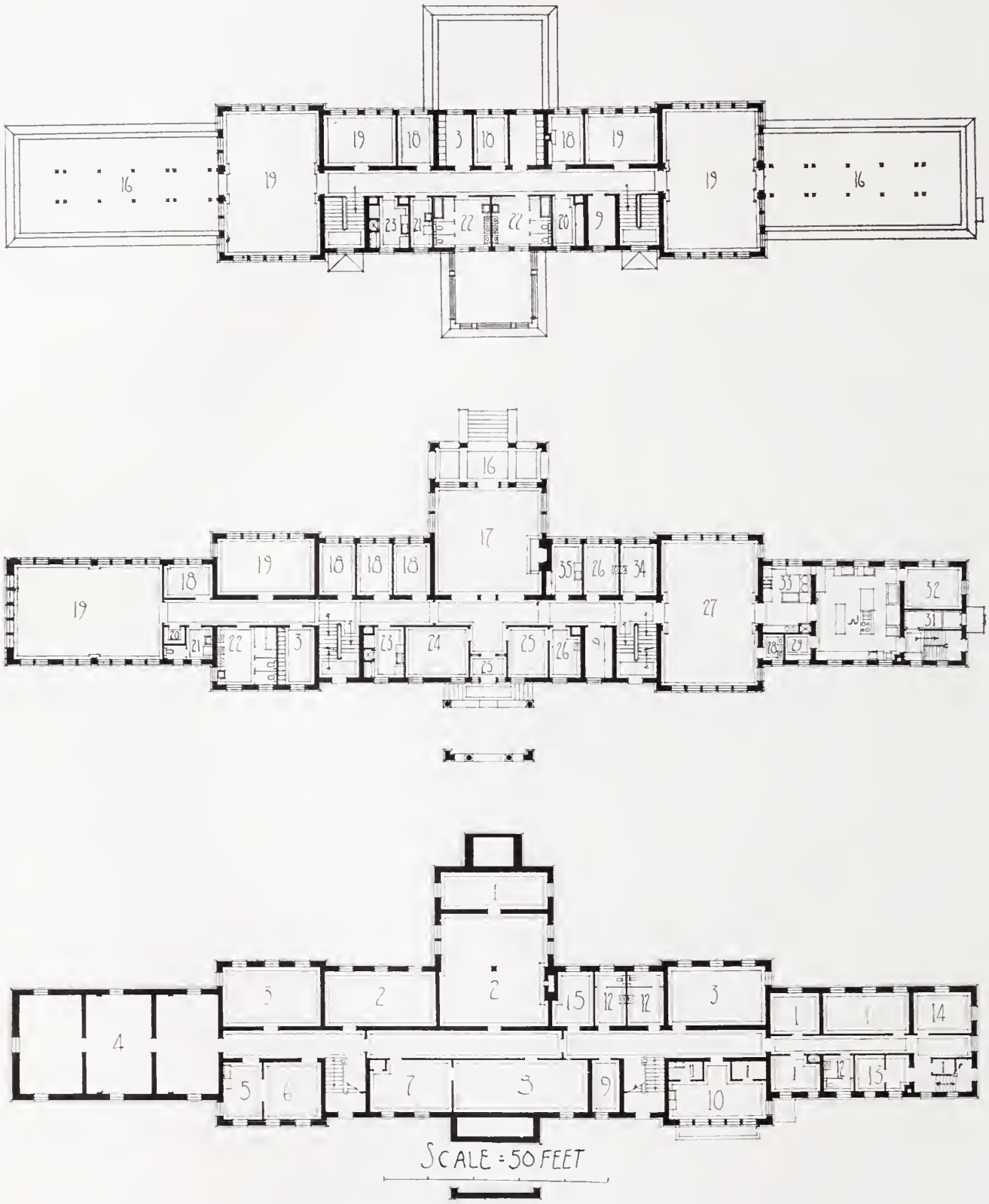

Fig. 5. Floor plan of the basement and the first and second floors of the Riverside Sanatorium.

1. Stoke room.
2. Trunk room.
3. Locker room.
4. Unexcavated.
5. Autopsy room.
6. Morgue.
7. Linen receiving room.
8. Sterilizing room.
9. Elevator.
0. Laboratory.
11. Dark room.
12. Public toilet.
13. Fuel room.
14. Refrigerating plant.
15. Cloak room.
16. Porch.
17. Recreation room.
18. Patients' room.
19. Ward.
20. Linen room.
21. Utility room.
22. Bath room.
23. Diet kitchen.
24. General office.
25. Physician's office.
26. Examination room.
27. Dining room.
28. Cuspidor room.
29. Steward's office.
30. Kitchen.
31. Refrigerator room.
32. Servants' dining room.
33. Scullery.
34. Guest room.
35. Nurses' room.

This is for the use of patients who might get an attack of coughing while at the table. Such a patient is required to go into this room to cough, and is permitted to expectorate in the cuspidors. This makes it unnecessary for patients to carry their sputum cups with them to the dining room.

The scullery and serving room is connected with the dining room by a pair of double-acting doors. All dishes are washed and sterilized in this room before being returned and stored in the kitchen. The equipment consists of a scraping table, an electric dishwashing machine, a clean dish table, a glass and silver sink, and a sterilizer. A large double cupboard is also placed in this room. The upper cupboard is set up eighteen inches above the lower, leaving the top of the latter free for serving purposes. The top of the upper part of

Fig. 6. Floor plan of the power plant of the Riverside Sanatorium.

A. Boiler room.
B. Ash room.
C. Fuel room.
D. Pump room.
E. Room for pressure tank.
F. Laundry.

this cupboard, as well as all other similar cupboards and lockers, comes flush with the plaster so as to prevent dust-catching surfaces that cannot be conveniently reached and cleaned.

The kitchen equipment consists of a hard coal range, vegetable steamer, combination steam table, cook's table and dishwarmer, urn stand and cupwarmer, coffee and hot water urns, serving table with cupboard for dish storage below, milk and cream cabinet, baker's table, vegetable sink, pot sink, butcher's sink and butcher's block. A large canopy extends over the range and vegetable cooker. This is connected to an exhaust fan that draws all smoke and steam off from the range and cooker. All cupboards, tables, and sinks in the kitchen and scullery are of metal, with the exception of the top for the baker's table and cook's table, which are of maple strips bolted and glued together.

The clean dish table in the scullery is connected with the kitchen through an opening in the wall, so that dishes can be shoved through. This arrangement has proved to be a great convenience and time-saver.

A large storage refrigerator and a small chef's refrigerator are located back of the kitchen. These are cooled from a refrigerating plant placed in the basement directly below. The milk and cream of diet kitchen refrigerators is also made at this plant. The servants' dining room is located next to the kitchen and is a well-lighted, cheerful room with three large windows.

A small steward's office is located next to the kitchen and connected by a dumbwaiter with the store rooms in the basement below.

The second story is given up entirely to patients' quarters, with accommodations for twenty-nine; twenty can be cared for in two ten-bed wards, and the remainder in smaller wards and private rooms. Here, as well as on the floor be-

Fig. 7. Recreation rooms of the Riverside Sanatorium. French doors open into the corridor facing the entrance of the building.

low, the south side is used for patients' bedrooms and wards, while the toilets, utility rooms, etc., are placed on the north side. This floor is planned to be occupied by men, while the first floor is for women patients. The toilet and locker room facilities are so arranged, however, that patients of both sexes can be housed on this floor. The diet kitchen and utility room arrangement is the same as for the first floor. The flat roof over the kitchen and the large first-story ward is utilized as a roof terrace on which the patients may walk or sit. Beds may also be rolled out on this terrace, as the floor is almost level with that of the wards. Part of the terrace is covered with a roof that serves as a shelter in stormy weather and gives shade in the hot days of summer.

The windows in all the patients' rooms and wards have three sashes, so designed that they can be dropped into a pocket below the sill so that these rooms may be turned into what are virtually porches. Ceiling light fixtures in all the patients' rooms are of the indirect type. Indirect light fixtures with luminous bowls are used for the dining room and recreation room.

The signal system is of the silent type, arranged so that when a signal is given, a lamp is lighted over the door of the room where the call comes from, and also in the head nurse's office and at the nurse's desk on each floor. A buzzer is also provided at each of the nurse's desks, as well as in the head nurse's office, that can be cut into the system at will by the operation of a push button switch.

The doors throughout the first and second stories are of the flush veneer type, except for the French doors, which are mill made. All doors have transoms. These are made of wood to match the doors in all the patients' rooms, so as to prevent light from shining through. The woodwork throughout is birch, stained a tobacco brown color, varnished, and rubbed.

The floors throughout the first and second stories are of terrazzo with coved base six inches high. This base extends through all door openings with the jambs set on top of the base. The stairways, from basement up, are of terrazzo, with the corners rounded to make cleaning easy.

An intercommunicating telephone system is installed, with stations in the general office, superintendent's office, head nurse's office, the nurse's desk on each floor, kitchen, laboratory, laundry, nurses' home, power plant, and water filtration plant. The city telephone is also installed in the general and superintendent's office and in a booth for the use of patients.

In the power plant and laundry building are located the two boilers, cold and hot water supply tanks, the necessary pumps for the heating system, fuel and ash rooms, etc. The heating system is a two-pipe vacuum system. This is much to be preferred to a gravity system of steam heating as all condensation is pumped back into the boiler room, eliminating all possibility of the radiators filling with water where the windows are kept open in cold weather. It also does away with air valves, necessary on a gravity system, which so often cause annoyance through leakage and escaping steam, if not properly regulated. The vacuum system of heating should therefore be used in sanatoriums where money will permit.

The laundry occupies the entire floor above the power plant and therefore has good light and ventilation. The equipment is up-to-date, and consists of one large washer, extractor, flat work ironer, mechanical dryer, soap tank, starch cooker, ironing tables, body ironer, and cupboards. All machines are driven with individual motors, thus eliminating the noise and waste of power incident to shafting and the extra pulleys and belts made necessary when several machines are run by one motor.

Everything has been designed to promote efficiency and the superintendent of the institution says that it "is the best constructed, most conveniently arranged and well-equipped institution" with which she has ever been connected during her experience.

POOR FARM GOES INTO THE DISCARD

County Infirmary Takes Its Place in Up-to-Date Communities—What a Rural County Can Do at Small Expense

By CHARLES E. ALLEN, Superintendent Bartlesville Hospital, Washington County, Oklahoma

"Over the hills to the poor farm," is a phrase which is going to lose its dread for the sick and old and poor in communities which follow the example of Washington County, Oklahoma.

The evolution from poor farm to county hospital is perfectly illustrated in the plan carried out by the county commissioners in the combined county hospital and home which was adopted in April, 1918.

Up to this time the county charges had been cared for at the county farm at Ramona, twenty miles from the county seat. There were no facilities for caring for the sick and consequently they had to be removed to the Bartlesville hospital at great expense to the county and often at the cost of suffering to themselves. The first move to remedy this condition was made in March, 1917, when a building was leased in Bartlesville for a county infirmary, and the inmates from the poor farm at Ramona were installed in it. An operating room was established, equipment installed, and a stock of drugs and supplies kept on hand for an emergency. Several minor and some major operations were successfully performed at much less cost than in the old days when the patients had to be transported from the poor farm.

The plan proved so successful and so much more economical than the old system that it was decided to make it permanent. The county commissioners were on the point of putting up a hospital for the poor, since renting was found to be both unsatisfactory and extravagant, when it was found that the Bartlesville hospital, owned by private interests, was for sale. A little repair and readjustment made it just what the commissioners needed. A four-room cottage was erected in the rear of the building for incurable cases. A trained surgical nurse was placed in charge of the operating room and a diet kitchen was installed under an experienced superintendent. A card index and report book give complete records of all cases and a financial report is made each month.

Not for anything would the county commissioners go back to the old system. It is surprising that out of the 4,800 counties in the United States, only 359 maintain hospitals for their poor, but the county hospital is steadily gaining ground.

Home Nursing Classes Started in Tenement Quarters

Five classes in elementary hygiene and home nursing for women are in full swing at the first Red Cross tenement headquarters opened in a four-room apartment rented by the Red Cross at 510 West 26th Street, New York City.

One class is made up of the younger women of the neighborhood, and the older women are instructed another evening.

PRESENT-DAY MEANING OF SURGICAL ASEPSIS

Undisturbed Wound-Healing the Ideal—Obtained When Protective Forces of the Body Can Cope With the Bacteria Entering the Wound—Quickness in Operating An Important Factor

By ARTHUR E. HERTZLER, M.D., Halstead Hospital, Halstead, Kas.

GENERALLY speaking, asepsis means the absence of sepsis, which in clinical parlance means suppuration. Such a distinction was specific enough at the time when elimination of the grosser manifestation of suppuration was a great achievement. Since, however, it has come to be a disgrace for a surgeon to have a suppurating wound of his own making, we can concern ourselves with some of the finer details, for between ideal wound-healing and pus-formation there is a wide gap. We now broaden our conception of asepsis to encompass all that looks to undisturbed wound-healing.

So far as the material the surgeon uses, the product of the sterilizing room, we may speak of absolute absence of bacteria. The means employed to sterilize apparatus and dressings render them bacteria-free. It is no longer considered good form to blame the nurse for septic wounds that may confront us.

Once the relation of operator and patient are considered, we can no longer speak of a bacteria-free sphere; the surgeon and patient each bring his quota of bacteria. It becomes necessary then to consider the best way of coping with the few bacteria that gain access to our wounds. The greatest sources of bacteria are the skin and intestinal tract, for, since most of our operations invade one or the other, we most certainly disturb a greater or less number of bacteria. The regions which harbor the largest number of bacteria, as about the rectum and mouth, often are the best able to cope with them, because of an abundant circulation.

Another source of contamination is the surgeon's hands. He is apt to finger more or less the surface of the body, and, when then the fingers enter the wound, bacteria are deposited. Koenig long taught that the large joints of the body could be safely opened only when all manipulations were carried out by means of instruments which had been sterilized by boiling. Lane has more recently emphasized the same idea in his technique of bone-plating. The general use of rubber gloves has much reduced the frequency of direct finger contamination, but even with their use bacteria are sometimes transmitted by the surgeon. If the surgeon allows his fingers to become contaminated by pus he will occasionally find that he has transmitted a malignant organism of a species which infected a previous patient.

Oral examinations also may gain entrance to the wound. Nasal respiration does not disseminate bacteria. Speaking produces more or less salivary spray which transmits bacteria. This is particularly true if the surgeon engages in vehement criticism of assistants or nurses. The surgeon should, therefore, either keep his mouth shut or covered while operating.

The use of a separate operating room and operating room personnel for pus cases is of prime importance. Open hospitals, where inexperienced men operate, should have a special room for them, for this type of operator has means all his own of putting a spike in the machinery of the regular operator.

The foregoing remarks have to do with lessening to a minimum the number of bacteria that enter the wound, no matter how perfect the technique; the surgeon, however, must go on the theory that bacteria have gained entrance to his wound. His solicitude will then be directed to the preservation to the utmost of the defensive forces of the body. Those things which favor the development of the few virulent bacteria must be avoided, and anything which prevents the activity of the defensive factors must be shunned. Hemorrhage must be carefully controlled. Dead spaces must be prevented in order that blood and serum may not collect. This can be accomplished by suturing and hemostasis. Mere ligation produces an irritation which invites exudation, therefore as few vessels as possible may be cut. Any brusque manipulation adds its quota of destroyed tissue which, in turn, produces an exudate favorable to bacterial growth. The use of irritating ligatures may cause an exudate; therefore, the least irritating suture should be employed. No chemical may be allowed to enter the wound and all harmful physical agents, notably the hot pack, must be avoided.

Time also is an important factor. The more quickly an operation is done, generally speaking, the better, for quickness implies that the surgeon has done his job in a workmanlike manner and spent no time in producing needless traumêa. Finally, the relation to the environment must be pleasant. If the surgeon's assistants are in fear of criticism, there is more likelihood of error than if all work is in sympathetic harmony.

JOHN SEALY HOSPITAL, GALVESTON, TEXAS

No Longer One Hospital But Many — Steadily Increasing Group Grown Up Around Original Building of 1889—Noteworthy Children's Pavilion and Woman's Hospital

By MRS. T. MILNE, Superintendent Aultman Hospital, Canton, Ohio

THIS institution was founded by the bequest of John Sealy, who died in August, 1884. Possessed of a large fortune, inspired by generous and philanthropic motives, and realizing the great need of a hospital in Galveston, he left

Fig. 1. Main building of the John Sealy Hospital, Galveston, Tex. This building has been twice remodeled and enlarged since it was built in 1889.

$75,000 to be devoted to establishing an up-to-date hospital in the city. He named the city council of Galveston and the regents of the University of Texas to manage and conduct the institution jointly for the reception and care of the sick. According to the will of the generous founder, the regents and their successors are to have the direction, ownership, and disposition of the hospital. An additional $50,000 was given by Mrs. Rebecca Sealy to complete and equip properly the original hospital building. The hospital was erected in the year 1889-1890, and many new buildings and renovations have been added to it since that date. The present capacity of the hospital is 330 beds.

The main building of the hospital was repaired, renovated, and remodeled in 1912 at a cost of $80,000, and, in the years 1915 and 1916, it was again remodeled, enlarged, and refurnished at a cost of $270,500. These improvements, indispensable for the efficiency of the institution, were made possible only through the philanthropic generosity of Mrs. R. Waverly Smith and Mr. John Sealy, daughter and son of the founders of the hospital, whose wise benefactions doubtless inspired in their children a desire to see the benevolent work inaugurated by their parents carried on to its full fruition.

The main building with its beautiful Gothic entrance contains on the first floor the administrative offices, reception room, men's surgical ward of twenty-two beds, men's medical ward, devoted entirely to marine and navy patients, bathrooms, diet kitchens, storerooms, and the nurses' dining room. This is a large, well-lighted, airy room with tables for four persons, which make it look quite homelike. The cafeteria system is used in the nurses' dining room and is found to be a great success.

On the second floor are nine beautifully furnished private rooms and two wards, each of twenty-two beds, with large porches, on which the patients rest and smoke. On the third floor are eight private rooms, each of which has a view of the sea. In many of the rooms the patients can lie in bed and watch the large ships come into the harbor. There are also a private ward of twenty-two beds, bathrooms, diet kitchen, supply rooms, the main operating room furnished in white tile, sterilizing room, small operating room, x-ray room, and pathological laboratory.

A brick building for colored patients was built in 1901 at a cost of $18,500, donated by the New York Chamber of Commerce. This was supplemented by $3,000 from the funds of the general

Fig. 2. These newcomers to the John Sealy Hospital enjoy the benefit of Texas' climate on the long sun parlors provided for them.

relief committee of 1900. This concrete, two-story building accommodates sixty-three beds. The first floor contains one public ward of thirty beds, diet kitchen, dressing room, supply rooms, and nurses' dining room. On the second floor are one private room, one private ward of four beds,

one public ward of twenty-five beds, and a well-equipped delivery room. The colored patients have every home comfort given them, but their hospital is badly in need of more beds. Often eighty-five patients are in this hospital at a time.

The isolation pavilion for contagious diseases

Fig. 3. A sunny corner of the nursery of the John Sealy Hospital.

was built and furnished in 1912 by the board of regents at a cost of $17,500. Of this sum $13,000 was taken from the state appropriation for the Galveston quarantine station and $4,500 from the available university fund. All infectious diseases are taken to this building, which is separate and away from the other buildings. Its six private rooms and four wards contain accommodations for thirty patients. The nurses in charge have rooms there and are kept apart from the other nurses.

A children's hospital was added to the group of buildings in 1912 by the Texas Anti-Tuberculosis Society at a cost of $13,000, raised by the sale of Red Cross Stamps. It was furnished by the Young Ladies' Hospital Society of Galveston. In this two-story cement building many children with all forms of tuberculosis are kept on the porch, where they have sunshine, fresh air, and good food, and in a short time show great improvement in their condition as a rule.

On the first floor are the reception rooms, kitchen, private room of four beds, ward of eight beds, and porch of eight beds, always occupied by tuberculous children. The well-kept linen rooms, bath rooms, and supply closets are also on this floor. The second floor is set apart for babies, with a ward which contains eight beds and a porch which contains six. There are besides two private rooms, dressing rooms, and sewing and supply rooms. The wards are well ventilated and well lighted and are arranged so that the sun can shine in all day. The children are given every comfort, and phonographs and toys help to make the children's hospital a happy home. The nurses try to make the children forget their pains and troubles through play and occupation, and the ones who are able have been taught to knit. During the war they did their best for the Red Cross, and twelve pairs of socks, eighteen pairs of wristlets, eighteen sweaters, nine mufflers, three helmets, three dozen knitted wash cloths, and thirty woolen squares bear witness to the busy fingers and big hearts of these small patriots.

The woman's hospital was erected and furnished in the years 1914 and 1915 by Mrs. R. Waverley Smith and Mr. John Sealy at a cost of $4,000. It is equipped with cosy porches on each floor, which extend the whole length of the building. On the first floor is a pleasant reception room, an attractive private ward of eight beds, diet kitchens, treatment rooms, sewing rooms, and storerooms for the hospital supplies and linen. On the second floor is a ward of eight beds, one of six, and one of four; here are found also the well-lighted, sunny nursery with a southerly aspect, the delivery room, bathrooms, treatment rooms, diet kitchens, and linen rooms. The third floor contains ten private rooms, treatment rooms, linen cupboards, etc. The large porch is well screened and has an ample supply of easy chairs so that convalescent patients can have the full benefit of the sea breeze and sunshine. On the

Fig. 4. Rebecca Sealy Home for Nurses. Built by the state in 1914-1915, this building provides commodious and pleasant home for the eighty nurses in training of the John Sealy Hospital.

fourth floor are two wards of thirteen and eight beds, diet kitchens, treatment rooms, bathrooms, and the operating room.

The Rebecca Sealy Home for Nurses was built by the state in the years 1914 and 1915 at a cost of $90,000, and furnished by the city of Galveston at a cost of $4,000. It is a large cement build-

ing with accommodations for eighty nurses in training. In the basement are the box rooms and diet kitchen where the practical work on dietetics is taught. On the first floor is a comfortable and well-furnished sitting room. The second and third floors are entirely devoted to bedrooms, each nurse having a separate room. The superintendent of the hospital and the superintendent of nurses each has her suite of rooms in the nurses' home.

The school of nursing is of high grade, and has grown so much of late that it was found necessary to house the graduate nurses in nicely furnished, homelike cottages. A two-story cottage is used for the probationer nurses.

The hospital is well staffed and is divided into three departments, administrative, medical, and nursing. The superintendent is in charge of the administrative part; the superintendent of nurses is in charge of nursing with her assistant and the instructor of nurses; a graduate nurse is in charge of each building, and two graduate nurses are in charge of the operating rooms. A pathologist, and x-ray operator, and a woman anesthetist are also employed. Seven interns are employed in the hospital and housed in a separate building.

The kitchens with their floors, walls, and ceilings of white tile are located in the basement. Under the dietitian who is in charge are two university pupils who are taking two months' training in practical dietetics. The basement also houses the pharmacy and the servants' dining rooms.

The entire laundry work for the hospital is done in the well-equipped and up-to-date laundry.

The out-patient clinic of the John Sealy is very complete and up to date. It has separate departments for white and colored patients. There is a well-equipped operating room where minor operations are performed and an emergency room where ambulance cases are admitted and examined by the intern before being assigned to their different departments. The mornings are devoted to medical, surgical, and gynecological cases; the afternoons to eye, ear, nose, and throat, and children's diseases. The salvarsan treatment is given twice a week to the outside patients. A graduate nurse is in charge of the nursing in this department with her three assistants, who are nurses in training.

SPRING PREPAREDNESS FOR BLANKETS AND PILLOWS IN THE HOSPITAL

Some Points About the Washing and Care of Wool and Cotton Blankets—Renovating Feather Pillows in the Laundry

By LINA STRYKER FISH, Housekeeper, Chicago Municipal Tuberculosis Sanitarium, Chicago

AT this special time of the year comes the real work relative to the season and to "spring preparedness." We are confronted now with the care of blankets. These are among the most expensive accessories of the housekeeping department, and upon their care depends their longevity and the comfort one takes in using them. We have in use between forty-five hundred and five thousand blankets. These comprise all-wool single blankets and 60 per cent wool double, and, as usual in institutions, whether the number of blankets is large or small, no place was prepared for their care. The first year that it became necessary to look after this matter, I was confronted with a problem, but, as "necessity is the mother of invention," I took the bull by the horns, and we have evolved a system that has been found safe as far as moths or dust are concerned and very efficacious.

We took rooms that were used for storage, seeing to it that they were not subject to floods or sweating steam pipes, and put up cases of "deaded" ceiling, arranging them so that each compartment held just so many single or double blankets, folded exactly alike. We knew that when we had that space filled we had its allotted number. Upon the many cases we kept a card index. The index corresponded with the blankets inside and with the different units sending them for storage. By this means we were able to return in the fall, when needed, the same blankets that had been given care during the summer. We were very careful to see that moth marbles were placed among them in sufficient numbers to insure against any damage from moths, and I can state that, owing to this plan, we have never had a single blanket attacked by that dreaded summer scourge, the moth. It might be well to state here that all blankets are examined carefully to decide whether they require laundering or merely airing.

When laundering was required, we saw to careful washing. One of the most important factors in a successful cleansing is the soap. It is necessary, in consideration of the animal wool, to have a vegetable soap if possible for the purpose of keeping down the shrinkage, and, of course, the water must be kept at the same temperature throughout the process. It is best to give them

two suds but not to use too much soap; the second suds should be light, with almost one-half less soap than the first. All soap must be rinsed out for perfect work. With the drying of woolen blankets comes the principal task. Many are obliged, from restricted grounds, to use the dry-room tumbler, and this will do the work if the heat is regulated to a little above natural, but if the blankets are given too much heat they shrink and become hard, no matter how well washed. If it is possible, they should be dried outside, preferably on the lawn, as it is much easier to spread them and it makes such a difference in their condition if they are exposed to sun and air. In the case of cotton blankets, the drying should be done with the dry-room tumbler or in a dry-room raththan with the mangle. We all know that there is more wear and tear in the laundering and mangling of flat work than in the using. Cotton blankets can be folded up systematically and piled from the dryer, and then the nap is saved and they will still be sufficiently smooth for the bed. One-half of the wear, as we have found by experience, results from putting them through the mangle. This, of course, applies more directly where cotton blankets are used for outdoor sleeping and take the place of sheets. The tendency with the substitute for the sheets is to put it through the laundry more often than is necessary, for the habit of a change of sheets every week is strong.

While speaking of blankets, it may be said that feather pillows can also be treated to a bath and renovating bills be saved. The pillows should be put in the machine with about the same soap that would be used for blankets; regular laundry soap will do for this. The loads should not be heavy. The water should be a little warmer than for blankets, and the pillows should be given a good washing. Of course the extent of the first suds depends on the condition of the pillow. They should be given a second suds and rinsed several times. All the water must be kept at the same temperature after the first suds. Then the principal thing is the drying. They should be put in the dry-room tumbler and kept tumbling until dry. If there is not time to give them a full drying in the tumbler they can be placed in the regular dryer and finished in the tumbler. They will come out like new pillows.

FIGHTING THE BACTERIA THAT CAUSE INFECTION

A Sterile Surface and Sterile Instruments the Commonplace of Caution—Punctured Rubber Gloves a Source of Danger—Necessity for Sharp Instruments and Gentle Handling to Leave Defensive Tissue

By FRANK J. HALL, M.D., Consulting Pathologist, Wesley Hospital, Kansas City, Mo.

IT seems strange that so many otherwise excellent hospitals still are having trouble with infections of operative wounds obviously contracted in the operating rooms. Close bacteriological scrutiny of suture material and gauze has never in my hands revealed the source of the infection. The surgeon is often disposed to fix the blame on the nurses or the operating-room materials. It is my conviction that this is unjust in the vast majority of cases and that the real blame attaches to those whose fingers have come in contact with the wounded tissue. This view has led me to survey this problem from every angle from which it was possible to trace the source of these embarrassing infections and suggest preventive remedies. First, it is to be pointed out that but very few species of micro-organisms are found in these lesions and that these possess a feeble resistance to the customary steaming and boiling generally practiced in the preparation of instruments and linen and to the cleansing and chemical treatment of the skin surfaces of the patient. The organisms generally recovered in cultures and identified on direct staining of the pus are in order of frequency, *Staphylococcus albus, Staphylococcus aureus, Streptococcus pyogenes, Bacillus coli,* and *Bacillus pyocyaneus.* None of these are spore-bearing and all are safely killed by fifteen minutes' boiling or steaming. These precautions, applied to rubber gloves, instruments, gauze pads, and towels are more than adequately taken in all hospitals, hence one narrows the inquiry down to a few simple factors.

First of these is the much-maligned suture material, preparation of the patient's body surfaces, condition of the surgeon's rubber gloves, and, finally, the mechanical treatment of the wound itself. Modern suture material is so faultlessly prepared, stored, and antisepticized, that it is the last guess to blame it for wound infections. This conclusion is borne out by many negative culture tests, which I have conducted on suture material obtained from several standard manufacturers.

In the preparation of the patient's body, nothing seems to me to be superior to the standard

tincture of iodine, applied at least thirty minutes before the contemplated operation and upon a scrubbed, shaved if necessary, thoroughly dried, and oil-free skin surface. Each of these items of preparation is very important; the iodine will not penetrate a wet or oily skin, neither can it efficiently sterilize the skin to the necessary depth in a few moments, as I have often seen surgeons expect it to do. I also believe it to be undesirable to wash off the iodine with alcohol and thus deprive the skin of its continuous action during the operation. To obtain an oil-free skin, two available chemicals can be obtained anywhere, namely, ether and benzine.

Next in importance is to minimize the number of hands that touch the wound. Never, under any circumstances, permit a bystander to explore for demonstration purposes, even if he be gloved and properly prepared, previous to the operation. In his preoccupation in watching proceedings, he may have scratched his nose or adjusted his glasses. These curious faults have doubtless been observed as frequently as is necessary to convince a careful operator of the necessity of rigorously following this rule.

Next of importance is to avoid traumatizing the wound unnecessarily by the use of dull knives or scissors, or by an incision too short to permit of easy access to the lesion to be remedied. This leads to undue traction on the wound edge. When inflicted upon fat and thick abdominal walls, this leads to the crushing and devitalizition of poorly nourished fat cells and leaves behind a lot of free fat and a poorly defensive tissue. Blinded spaces of every kind must always be most carefully guarded against.

After this in importance comes the rubber glove. After a rubber glove is used three or four times it begins to sag, loses its life, and invites the formation of pores, minute tears, and becomes very vulnerable to puncture. This puncture item is most important in the prevention of wound infection. In the old days, before the advent of the rubber gloves, bitter experience had taught the necessity for great care in the toilet of the surgical hand. Today we see an ever-increasing laxity in this particular, on account of the universal dependence on the sterile rubber glove. This confidence is well placed, if the sterile glove remains intact.

Alas! this is not always assured. One sees surgeons of otherwise faultless technique reaching into the depths of a deep incision to grasp a needle to pull it through the tissue. A minute puncture expanded under the pressure exerted permits a small drop of sweat from the surgeon's hand to gain admittance to an otherwise sterile wound, and then everyone wonders why an infection follows. When a surgeon has an infection of the finger nail of even the most minor degree, it is very important that new gloves be worn and that all needles be grasped by forceps rather than by the gloved hand.

Finally, the tension of the closing sutures must be carefully observed, and I am ashamed to express this caution, as it is so well known, because of the great necessity that a proper and unstrangled blood supply be furnished to the wound to assure complete nutritive supply for the proper repair. It would be better to leave an infected wound wide open, than to close too tightly a physiologically sterile one. By the term "physiologically sterile incision," we mean an incision that has not received a sufficient quantity of infective organisms to break down the defenses of an otherwise normal surgical wound. It is inconceivable that any surgical wound is classically sterile. The great problem is to avoid inflicting upon a clean tissue an infecting dose of pyogenic organisms.

Next is to be considered the wound dressing. When one has observed all the known rules for avoiding trouble, what kind of dressing is to be applied? Personally, I am committed to the belief in non-absorbent dressing for presumably safe surgical incision. Why? Because the natural wound secretion is Nature's best defense against all comers, unless they be grossly superior in numbers or virulence. The fibrine threads provide the bridge over which fibroblasts cross and new capillaries penetrate. The serum of the blood and the lymph from their channels provide the necessary, natural defensive antibodies and proteids.

If the following forty-eight hours see no rise in temperature or pulse and no unnatural sensations, let well enough alone. If the contrary be true, remove the dressing and examine, eye first, the wound. If evidence of infection be present, it will be evinced in the following ways: tumefaction, local abscess, diffuse erysipelatous reddening, or fetid odor. Tumefaction without pus formation can be successfully met by cold packs. Local abscess must be evacuated. Diffuse erysipelatous reddening is the nut to crack. Two methods are to be applied, the first biological, the application of antistreptococcus serum to the wound. This should be applied on a thin cotton layer covered by rubber tissue to inhibit evaporation. The second method employs iced solution of 40 per cent magnesium sulphate. The fetid wounds should be mopped out every day with 0.5 per cent of formaldehyde in a 10 per cent solution of glycerine. This procedure also applies to the green-pus wounds.

SUGGESTED IMPROVEMENTS IN DISPENSARY SERVICE

The Clinic Requires More Serious Attention Than it Receives—Improvement to Be Found in Social Service, Pay Clinics, Better Records, and Discrimination Among the Poor

By ISIDORE COHN, M.D., Fellow American College of Surgeons, New Orleans

THE modern dispensary and out-patient service represents one of the greatest forces for the welfare of a community. This fact is not understood thoroughly by the medical profession and hardly, if at all, by the lay community. The reason that the value of this type of public service is not understood by the medical profession as a whole is that a large percentage of them think only of utilizing their time in ways that will return immediate financial dividends. The community looks upon clinics only as a haven for the pauper class.

The conception of both is equally wrong and shortsighted.

A clinic offers opportunities for relief of the poor, which are denied the middle class and can be obtained by the rich only at great expense. The etiology of obscure conditions is sought through liberal consultations and with the aid of the clinical laboratory. After investigation, the cause having been determined, the proper treatment is instituted and the period of disability diminished. In this way the clinic acts as a source of prevention of human waste. Those in need of clinic service know this, and they seek out and find those clinics which are properly administered.

Aside from this great service to the public, clinics have a more far-reaching benefit, which is reflected in the service rendered by the doctor to private patients. The true saying, "Experience is the best teacher," approaches the axiomatic here.

Edward Martin, of Philadelphia, has said, "When a man graduates from a medical school he is only 20 per cent efficient to his community, but when in addition he is trained in a good hospital, he is competent; a teaching hospital means to the community 80 per cent of such a man's efficiency." Add to the period of internship, hospital association through the dispensary service, and we have increased the 80 per cent efficiency already acquired. Dispensary service should teach the attendant to keep systematic, concise records, as well as give him a keener appreciation of clinical phenomena, and hence more accurate diagnostic acumen.

The American College of Surgeons is making an effort to raise the standards of practice by demanding certain requirements of the men upon whom it sets its seal of approval. The clinical opportunities of a good dispensary pave the way to the goal. Eventually the community will be as particular about the surgeon as they are exacting in other directions. When that time comes, the dispensary will not have to plead for the cooperation of the medical men; they will seek the opportunity to learn.

One of the reasons for a low standard of dispensary service is the lack of cooperation on the part of the average dispensary patient, due to ignorance on his part. As a result of the survey of Boston we are informed, by Dr. J. A. Hornsby, that 89 per cent of the sick are treated in their homes. Laboratories and consultants are needed in many cases for a scientifically accurate diagnosis. If 89 per cent are treated in the home, and if of this 89 per cent a greater percentage still are treated by the lodge or society doctor, then the fact can be realized that the majority of our own people are not given the best medical care. The dispensary can rectify this condition to a great degree with the intelligent cooperation of the patient and the extension of social service in connection with the dispensary. The following suggestions for improvements may be helpful: (1) enlarge the social service department; (2) weed out all save the needy; (3) establish afternoon clinics; (4) establish pay clinics; (5) keep better records; (6) make frequent clinical reports.

Improvements in dispensary service may be expected along many lines when all concerned have come to a full appreciation of the value of the work. Emphasis should be laid upon the need of weeding out all except those entitled to free dispensary service. This can be done by enlarging our social service investigation department to the extent that each applicant for service must prove his inability to pay for adequate medical attention.

The fact that so many apply for treatment, who do not belong to the pauper class, suggests that there is something wrong with the type of service the small-salaried individual can obtain. The lodge doctor is underpaid and overworked; his facilities for accurate scientific diagnosis are meager and to suggest consultation means a confession of his own lack of certainty regarding the diagnosis; hence he does not call for consultation.

The result is a slipshod, empiric practice. If the dispensary plan can be broadened so as to take care of salaried men for a moderate fee, which would be paid into the hospital funds and properly divided, the economic saving would be great and probably many human lives could be saved.

Afternoon clinics would improve dispensary service in more than one way, particularly because it would enable the house staff to participate in the dispensary work. As it is today in many large hospitals, the intern has time only to assist in operations and give anesthetics. The best opportunity which the intern could possibly have for practice in differential diagnosis, is the clinic. Individual work under capable supervision is the best type of instruction. With the organization of an afternoon clinic and the ruling that dispensary service is part of hospital duty, as well as a stepping-stone for staff appointment, the dispensary service will be improved by the greater number of attendants and the public would eventually realize on the investment.

Better clinical records would improve dispensary service. The use of a cross-index filing system would make statistical computations from clinics easier of accomplishment and improve the final value of the clinic. Frequent publication of clinical reports stimulates interest, as well as improves the records.

In summary, the improvement to be expected in dispensary service will come through the cooperation of the hospital administration in providing adequate working material, of the visiting staff through conscientious effort, irrespective of the time-element, and of a community which is willing not to impose on a service due others.

WHAT IS MEANT BY SURGICAL ASEPSIS?

Greatest Care Necessary in the Sterilization of Instruments—An Alcohol Bath Inadequate—Danger From Spectators at An Operation

By A. NELKEN, M.D., Urologist, Touro Infirmary, New Orleans

At first blush the title of this paper, intended as it is for publication in a magazine circulating particularly among doctors and nurses, would suggest an enormous amount of presumption on the part of the writer. For why should physicians and graduate nurses require enlightenment on such a fundamental doctrine of their education as surgical asepsis? As well set about teaching the mathematician the multiplication table or the chemist the names of the elements. I do not mean to imply that any but a small percentage of surgeons and nurses require instruction along this line, but twenty years of intimate hospital association with both doctors and nurses has impressed upon me the fact that there is a great difference between the theory and the practice of aseptic surgery.

Infringements of generally accepted rules of procedure in asepsis are commonly due not to ignorance of the rules but rather to indifference or to impatience on the part of the surgeon or of his assistants. Few indeed have the excuse of the old country doctor whom I once saw walk up to the instrument tray during the progress of an operation and begin to finger the operating knives.

"But, doctor," exclaimed the startled operator, "your hands are not clean."

"Yes, they are," was the confident reply, "I washed them this morning."

His error was one of ignorance. But what of the professor of gynecology and obstetrics who permits himself to adjust his glasses at intervals throughout an operation because he has taken the more than doubtful precaution of rinsing them in alcohol? It is true that at best absolute asepsis is only theoretically possible, but the practical application of aseptic technique in surgery combines very definite requirements with very narrow restrictions.

Let us consider the measures at our disposal for securing sterility. Heat, of course, stands first. All instruments and dressings that will not be damaged by it should be subjected to a temperature high enough to destroy any organisms with which they might be contaminated. There is a general prejudice against the boiling of cutting instruments. This objection is, I think, largely ill-founded. The dulling of knives and scissors by boiling is due, I believe, more often to the careless striking of their edges against other instruments than to the effects of heat. However, if there be objection to the boiling of such instruments in water, it has recently been suggested that we boil them in oil. With all due regard to the surgeon's pet scalpel, if my own abdomen were to be opened, I had rather that the knife be not quite so sharp, perhaps, but certainly sterile. The usual practice of first immersing cutting instruments in carbolic acid and then

washing off the acid with alcohol is probably safe, provided the instruments have first been thoroughly cleaned mechanically. But the practice, with which I am familiar, of putting knives, scissors, and glass syringes in a tray containing alcohol which, sometimes, does not even entirely cover them, is, most of us will concede, entirely inadequate sterilization.

One of the common fallacies in regard to "sterilization," so-called, is the use of weak solutions of carbolic acid (1:20), bichloride of mercury (1:1000) or formaldehyde (1:1000) for instruments that may be injured by heat, as, for example, such instruments as cystoscopes and varnished catheters. If first mechanically cleansed and then left in these solutions for hours, such instruments may be considered sterile, but the usual practice of immersing them in such solution for a few minutes and then assuming that they are safe for use would be amusing if it were not sometimes tragic.

The introduction of the rubber glove in surgery —the boiled hand—was an enormous advance towards ideal asepsis, but the handling of the outside of the glove in the putting of it on and in adjusting it should be discouraged. Gloves may be absolutely sterile and then be contaminated by hands which, no matter how carefully scrubbed up, can never be "surgically clean."

In the early Listerian period, surgeons sought to secure aseptic surroundings by spraying the air with solutions of carbolic acid. One of the reasons—among others—for abandoning this method was the final realization, after considerable observation, that atmospheric contamination is a negligible factor. Virulent types of pathogenic organisms are not ordinarily present in the atmosphere of the operating room, and the tissue-resistance of the patient is able to take care of whatever infection may occur from this source. This factor of resistance in the patient is the explanation of carelessness on the part of doctors and nurses who are thoroughly conversant with the technique of aspesis. They see four out of five clean wounds heal by primary union. The suppuration that occurs in the fifth case is ascribed to "infected catgut," or to any cause save the true one.

Let me attempt to draw a picture of an operation as we sometimes see it. The postgraduate class enters the operating room which, we at once notice, is entirely too small for teaching purposes and which contains no seats. The men of the class stand restlessly about as the operator and his assistants, having scrubbed up in the washroom, enter. The anesthetist has already begun the administration of the ether. The nurse is busy arranging the instruments in the tray. While gloves and gowns are being put on, the operator is discoursing learnedly upon the operative indications for, let us say, inguinal hernia, and upon the proper operative technique. Benzine and iodine are applied and the operative field surrounded with sterile sheets and towels. The patient now begins to struggle against the ether. The operator and his assistants help the anesthetist to restrain him. In the struggle, dressings are disarranged, and gloved hands come in contact with non-sterile surfaces. Finally, the patient's efforts cease and he sleeps quietly. Which is the bichloride basin? Bichloride of mercury solution is the "holy water" of the operating room. Its magic touch washes away all sins of surgical uncleanliness. Hurriedly, gloved hands are rinsed in it. The disarranged dressings are readjusted about the operative field. The knife is taken out of its alcohol bath, dried, and handed to the operator. "This knife is dull. Let me have another." There is no other prepared. A hurried trip to the instrument room by a nurse in waiting, and she returns with a sharper knife. This is dropped into the alcohol tray. "Where is the knife?" impatiently asks the operator. Almost immediately, the new knife is taken out of the alcohol and handed to him. Later, the same performance is gone through with the scissors. All of those in the tray are too dull. Another pair is secured, dropped into the alcohol for a minute or two, and handed to the operator. "Gentlemen, you will notice that I am now separating the sac from the cord." The class crowd about the operating table, each one seeking a vantage point. They have not even bothered to remove their street coats. They rub elbows with the operator and his assistants. Their coat tails brush against instrument trays and dressings. The sac is adherent to the scrotal tissues. Careful dissection is required to separate it. The skin of the scrotum has not been sterilized. The fingers of the operator come in contact with this non-sterile surface. Again, his hands are hurriedly immersed in the bichloride solution.

At last, the operation is finished. "A very pretty demonstration," wisely exclaim the onlookers to each other and to the well-satisfied operator. But they do not know that four days later the wound has to be reopened and drained for pus, and that, six months later, the hernia has recurred.

This picture is overdrawn, you say. Of course it is for the great volume of surgical operations as conducted in well-regulated clinics. But the point that I want to make is that, sometimes, we see just such careless application of aseptic tech-

nique on the part of men who ought to be guiltless of such gross violations of well-understood principles.

Both the surgeon and the nurse should cultivate what I like to call "an aseptic conscience." Conscience is the still, small voice, that tells us of our misdeeds. A properly trained "aseptic conscience" should warn us when we are about to commit sins against surgical cleanliness; listening for this voice and heeding it should forestall that purgatory of the conscientious surgeon—infection following a "clean" operation.

THE RECORD ROOM OF THE BARNES HOSPITAL

How Indexes Are Organized—A Plan That Simplifies Filing, Economizes Space, and Makes All Records Readily Accessible

By ELIZABETH GREEN, Record-Keeper, Barnes Hospital, St. Louis

HOW to make a record department both efficient and economical is a problem for every hospital. In order to do this, careful consideration is necessary in the development of a record room. Records are bulky, and their expansion becomes a problem. Too often the record room is an afterthought, and a room planned for another purpose is used. A record room should be planned with expansion in mind. Should a loose-leaf system be decided upon, the filing cases will need an immense amount of floor space, and, eventually, it will be necessary to adopt a semi-loose-leaf system where the histories stitched into stiff pasteboard covers can be placed on bookshelves in order to make room for expansion. The usual, and possibly the safest, way of handling this problem is to bind the histories. This system insures against loss, as it is rather difficult to lose a large and bulky volume. At the Barnes Hospital we keep our histories for about a year in vertical filing cases, and then bind them so that we can shelve them and relieve the files.

The ideal record room should have adequate stack space to carry its expansion as well as enough vertical files for the most active histories, if a bound history system is used. Indexes should be kept in the same room in order that a minimum of time be spent in getting out histories.

The next thing is to instill in the record-room staff a proper sense of values. The important function of the record room must be made clear, namely, the facilitation of research and protection to the patient and the hospital. Never let any member of the record staff forget for a minute that this is the result to be attained. To accomplish this histories must be adequately indexed, so that the research worker has the material he wants at his disposal and the office can have what it calls for at a moment's notice. Histories fill two important and varied functions, for, while they become a research library of great value, they also furnish the greatest possible protection the hospital can have through their record of all examinations, operations, treatments, and tests made during the time the patient was in the hospital. In the event of a legal complication, these furnish the best possible brief for the patient and the hospital. Too many indexes are undesirable, and yet the ground to be covered must of necessity be observed from more than one point of view. Three indexes usually cover this, including name, diagnosis, and operation. Classifications for both diagnosis and operation must be selected and adhered to in order to make the files practical and useful, or else the same thing will be indexed under two or more titles.

The relation between the head of the record department and the doctors of the staff must be such that the doctors will come to the record department with the problems relating to the work they are interested in which they will later desire to investigate. If the head of the record department can make them appreciate her real interest in helping them to get at this information later, she will find out quickly what subjects it is well to index and that are not included in her files. It is a simple matter to index any subject at the time the rest of the indexing is being done and takes little time, whereas it is sometimes a difficult and tedious process to get at it either by diagnosis or operation. At the present time, for example, we have in our miscellaneous section of the diagnosis index, such titles as "Massive Dose Digitalis," "Histories Green Penciled and Motion Pictures," which obviously are not diagnoses, but are matters of interest to our staff. Later, should the interest die out, it is easy to discontinue or withdraw the cards from the files.

We index our histories at the Barnes Hospital by name, diagnosis, and operation. All cards are typewritten, and all files are arranged alphabetically.

The name index is the master-card of the system. On the face of the card are given the name,

age, sex, social condition, color, diagnosis, operation, service number, hospital number, date of admission and discharge, condition at discharge, and out-patient number. On the back of the card is whatever information we can secure for follow-up work, such as names and addresses of relatives, friends, and patient's physician. We also keep track of deaths of patients on the outside, as well as we can, through checking the death notices and burial permits from our local papers by our name index. When we find a name in these notices, the card is taken from the file, the word "dead" is added in red in the upper right-hand corner, and on the back of the card is added in red the date of the patient's death. A note is also added to the history, giving the date of death.

The diagnosis file is according to the Bellevue nomenclature. The diagnosis card has the name of the disease written at the upper left-hand corner and our reference is to service number. This plan is as economical of expansion as possible. Our histories are indexed according to services; consequently, in order to have one diagnosis file, we use a different-colored card for each service; thus, white means "medical service"; blue, "surgical"; salmon, "gynecological"; and buff, "obstetrical." Should we desire to see how many cases of tuberculosis, chronic, pulmonary, we have had, we turn to the infectious disease section, and under tuberculosis find all the cards with that diagnosis, separated into services by their color, but filed together in one file.

The operation index follows the plan of the diagnosis index.

At the discharge of a patient, the history is brought immediately to the record room, where it is kept accessible until "history meeting," which comes once a week. At history meeting diagnoses and final notes are added, and the histories are then returned to the record room as completed histories. A check is kept by the record department on histories that are due, and, should a history be held out, an explanation is requested. As soon as histories reach the record room, the work of getting them ready to index is begun. They are carefully inspected, all accessory reports are checked through a "lacking" list, and incomplete histories are noted and completed before filing. Histories are now ready for indexing, after which they are filed in vertical filing cases, until such time as it seems best to bind them. Histories are bound fifty to the volume by service number. This binding relieves the files and economizes space by shelving the histories.

At the time of indexing the histories, the annual report is taken. This is kept on cards, arranged by diagnosis and operation, similar to the diagnosis and operation files already mentioned. All information that is to appear in the report is on these cards, and, at the end of the fiscal year, the cards are taken from the files, already properly arranged, and the totals are added. From these cards it is easy to compile the statistical tables of diseases and operations, and the finished report requires only a few days to complete.

How to meet quickly every request that comes to the record room to the satisfaction of the staff and still to have the work handled by a small force, is an ever-present problem. For the best interest of the hospital, this must be done, for why spend money on record room employees merely because the department is carrying routine which long ago outlived its usefulness? A watchful eye must be kept for extraneous matters, and careful pruning done in order to develop new interests efficiently and economically.

THOUSANDS REGISTER FOR TRAINING

Rapid Increase in Number of Disabled Men Applying for Special Education

Rapid progress is being made in reaching the disabled soldiers, sailors and marines, who have received such disabilities as a result of service that they require vocational retraining. The Federal Board for Vocational Education, designated by Congress to rehabilitate the disabled, reports a total of 57,611 cases of disabilities registered. This is an increase over the preceding month of 18,042 cases, or 48 percent. The increase in the number of cases for the month of February over the month of January was 73 percent, and the increase of January over December was 80 percent, and the increase for December over November was 50 percent. The average rate of increase for the four months being 62 percent.

The source of these cases is as follows: From the Bureau of War Risk Insurance, 10,231; from the Department of Labor, 117; from the Red Cross, 6,710; from the hospitals, 34,063; from the men direct, 4,725; from other agencies, 1,765. Contact has been established in 40,276 cases. The vocational advisers of the Federal Board have completed surveys in 32,730 cases. These preliminary surveys are the necessary basis and foundation for future action, and it is upon these records that the training awarded the disabled man is based. Necessarily it is a slow process to make an exhaustive survey of each case, coordinated with the personal desires and wishes of the patient, and finally arrive at a course suitable for the man and which he personally desires to follow.

Of the surveyed cases, 4,302 have been recommended for approval, and 2,359 cases have been approved, and training has begun in 1,395 cases. Thirteen have completed training, and 80, for one reason or another, have voluntarily discontinued training.

An Hour Glass for Hand Scrubbing

An hour glass filled with sand enough to run the number of minutes your operating room technic requires for its hand scrubbing, placed over the sinks where your surgeons scrub before operating, is a check on their aseptic conscience and absent-mindedness.

Fig. 1. American Red Cross Hospital No. 5 at Auteuil. The Bois de Boulogne and the Eiffel Tower are seen in the background.

LITTLE JOURNEYS TO PLACES "OVER THERE"

American Red Cross Hospital No. 5—A Mushroom Growth on a Paris Race Course—American Nurses in French Hospitals Care for American Men

By MARGARET J. ROBINSON, with the American Red Cross, Paris

THE Metropolitan race course at Auteuil is just a little outside of Paris by metro or the tramway. May, last year, it was a hayfield, with a deserted grandstand and betting booths. France had something else to do just then besides betting on running horses or watching the ladies of the high and low world of Paris display their latest exclusive creations in gowns and millinery and their lap dogs.

On these empty grounds, construction was begun for a mobile tent hospital on May 9, 1918. At 5 a. m., the morning of May 31, the first patient arrived—part of a consignment of one hundred sixty gassed Americans. One could hardly say that the construction of 600 beds was entirely completed at that time, but the hospital was ready for patients. As the number of these increased, equipment and personnel were added to care for them. Two thousand wounded from Château-Thierry were cared for later, and another thousand from the July drive. In August there were twenty-three hundred patients who had been brought directly from Château-Thierry, the Toul sector, and from the Argonne Forest. From June to December, of 1918, eighteen thousand cases in all were treated in the hospital.

The hospital, like all other Red Cross militarized hospitals, was constructed at the request of the United States army. The personnel of the medical staff was partly from the army and partly from the Red Cross. The Red Cross furnished the business management and all the supplies. Lieut.-Col. George de Tarnowsky, of Chicago, was in command of the hospital. Major J. F. Clarke, of Fairfield, Iowa, was his assistant, and in command in Colonel Tarnowsky's absence. Miss Harriet Leete, of Cleveland, was in charge of the nursing force. There were performed 1,875 operations, and in the six months of the hospital's existence, although it handled serious cases at all times, the records show that only 135 deaths occurred during this time.

Fig. 2. Old betting booths on the famous Metropolitan race course and the completed tents of American Red Cross Hospital No. 5.

Eighteen hundred gas cases were treated at one time. The nurses say that they will never forget the sight of all these men with bandaged eyes. Some of the recoveries from gas and from wounds were almost marvelous. Many cases, apparently hopeless, made good recovery. After the drive in the Argonne Forest, the convoys brought in were all of badly wounded men, and yet there were few deaths, comparatively few amputations in proportion to the number of serious injuries, and few cases that were not hopeful of an ultimate recovery.

At various times in the short career of the hospital, eight different mobile units were attached as needed and then moved on. The medical staff was of the best. Specialists of authority in their own line of work formed groups for diagnosis. All facilities for this diagnosis were at hand, and

definite case records were kept. Each case was an individual one, and the subject of individual study on the part of the medical officer in charge of it. The nursing force at one time numbered 168. There were Red Cross nurses, army nurses, British nurses and American and French nursing aides, all working together in harmony, and with great enthusiasm for the success of the hospital.

Fig. 3. Willing pack horses unload tent tops.

The block plan here shown is the original plan proposed for the hospital at Auteuil and provides for its growth. This plan had to be adopted because of the layout of the race track, and the necessity for protecting the turf which had taken many years in the making. Each unit was like an island in a sea of precious turf. About two-thirds of the plan was carried into execution.

The construction used was that of the Bessoneau tents. These tents are built of heavy green white lined canvas on wooden skeleton framework. There is a half-foot of space between the inside white lining and the outside green one. The windows are double and have an air space between. They are sash windows, going up and down, with panes of isinglass. They have a canvas flap on the outside to keep out sun and wind. Besides the regulation hospital ward tents, each with a capacity of fifty to one hundred men, there were tents for administration, for living quarters of the personnel, kitchen tents, tents for stores, for laundry, for operating rooms, for recreation and movies, for baths and disinfection, for the dentist and the chaplain, and tents for the nurses' offices and recreation rooms.

"Number 5" was a city of huts and tents, a complete hospitalization.

After the splendid surgery, scientific diagnosis, and devoted nursing care given to our men at Auteuil, perhaps the most significant thing noticed was the home atmosphere of this tent hospital, which was encouraged by the staff and personnel at all times. No more than the absolutely necessary discipline was used as far as the patients were concerned. All things necessary, even foolish things, were done to keep up the courage and cheerfulness of the men.

Bands of good musicians from Paris came once a week and gave concerts, and they were good concerts. Poor music and poor musicians are not tolerated over here. It is a criminal offense on the Continent to be a poor musician and pretend to be a good one. American Red Cross Kitchen No. 1 sent ice cream and cakes for all those who could eat them, and real doughnuts, too. The nurses baked honest-to-goodness American pies when they had time, and, if some boy was downhearted and needed lifting up, they had a birthday party for him, even if it was not on the date

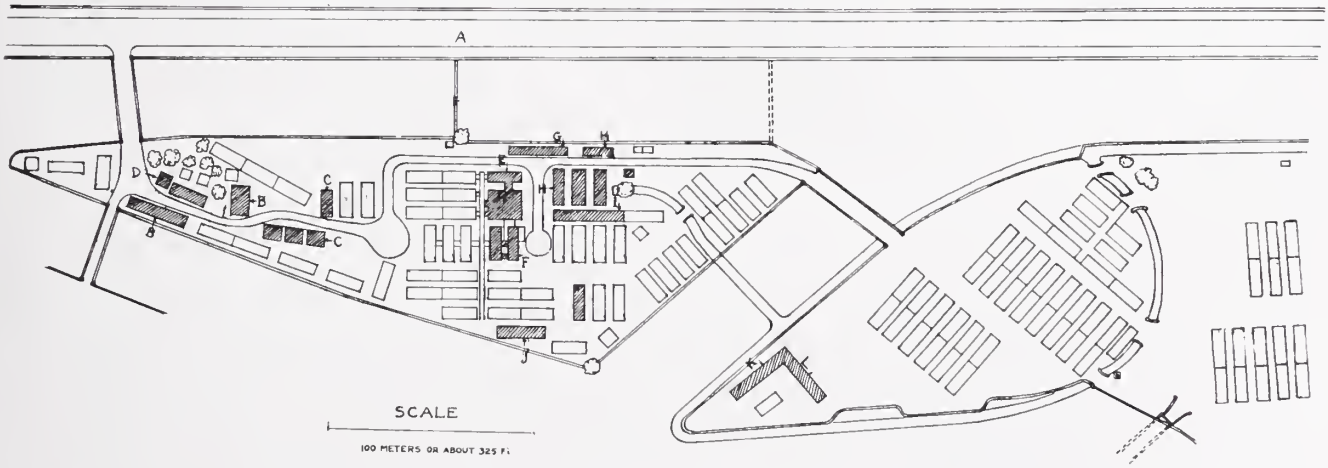

Fig. 4. Plan of American Red Cross Hospital No. 5. About two-thirds of this plan was carried into execution. The darkened rectangles represent the barracks, the others, the tents.

A. Allée des Fortifications.
B. Offices.
C. Linen barracks.
D. Toilet rooms.
E. Cement barrack for surgical dressing.
F. Baths.
G. Shower baths.
H. Stores.
I. Kitchen.
J. Pharmacy.
K. Movies.
L. Recreation hall.

Fig. 5. When the framework is erected, the tent cover is laid on the ground ready to roll over it.

stated in the family Bible, and somebody made sandwiches and real coffee.

This supplementary feeding had a larger value than merely creating a cheerful atmosphere. When a man lies on his back for weeks and months, with an arm or leg or hip in a complicated apparatus, and wonders if he is ever going to have a good arm or leg again, he loses weight and muscle and red blood, and pie or anything else that tempts him to eat helps to build new cell tissues as well as new courage.

In the recreation hut, Red Cross women furnished entertainment and games and writing material and human sympathy, and the doctors and nurses and corps men and social workers all pulled together with one definite object in view—to heal each wounded soldier as soon as possible, to send him back to the fighting line if it could be done, and, if that were not possible, to send him home in the best condition they could.

Fig. 6. Evacuation tent. Outgoing patients were checked out on the records and made comfortable for the journey.

Someone who saw the hospital at Auteuil, and its surgeons and nurses and patients said: "The names of the horses are washed off the betting boards, but the race course never had so many thoroughbreds on it as it has now."

American Nurses in the Service de Santé

The Service de Santé Militaire is a department of the French Ministry of War, and directly controls all care of sick and wounded soliders, all military hospitalization and military sanitary service. The administration of the Service de Santé is in Paris; different zones and war sectors are in charge of the inspectors general of the Service de Santé, who are responsible to the central administration in Paris. The service of the American nurses for the American soldiers in French hospitals is known as the "Service of Professional Aid to the Service de Santé."

Fig. 7. They haven't another thought in the world. Cards are among the most efficacious distractions of the wounded men.

The first attempt at this sort of service was made in the latter part of 1917 when four American Red Cross nurses were sent to a French hospital in Soissons, after a report had been received that American wounded were there.

As the number of American ill and wounded in the French hospitals increased, it became evident that in spite of the kindness and care given to our men by the hospital surgeons and nurses, our men were not doing well. This was due to the fact that neither the American soldiers nor the French personnel could understand the language of the other, and to the differences in American and French food, medical treatment, and nursing. The loneliness and depression of our men under these circumstances naturally retarded their speedy recovery.

After a conference with the medical inspector of the region where American troops were in French formations, an agreement was made with the bureau of hospital administration of the American Red Cross, whereby American nurses and French-speaking American nurses' aid might

be placed in French hospitals to care for the ill and wounded of the American army. The request for such service was to come through the surgeon-in-chief of the American division. Later, when the need for the service rapidly increased, the arrangement was enlarged upon, through the courtesy of the inspector general of the French army, to allow this plan to cover all of France.

A definite agreement was signed between the American Red Cross and the Service de Santé, which included rules to govern the situation, and orders were sent to the médecin chef of every hospital of the service in France to notify the office of the central headquarters in Paris of any ill or wounded Americans either received or about to be received and also to notify the same office when the service of the nurses were no longer needed.

All nurses sent into the army zones were militarized nurses and carried Red Cross Workers' permits. The American nurses were under the orders of the médecin chef of the hospital but were not responsible to the infirmières of the French service. This ruling was made necessary because of the essential differences between our system and the French system of nursing. Our

Fig. 8. Pipe smoke and American Beauty roses bring something like a home atmosphere into the days of this wounded dougboy.

hospital training and discipline and order of seniority among nurses are not known in France. Nurses in French hospitals are either volunteers or women who have had very little training, and it would have produced an impossible situation to have placed our nurses under the charge of the infirmières.

When a wire was received by the Service de Santé in Paris that American nurses were needed, that office notified the American Red Cross. The bureau of hospital administration through the head nurse of the personnel assigned to the Service de Santé, then sent a team, consisting of one graduate Red Cross nurse and one French speaking nurse's aid, to answer the call. Several of these teams were sent if the need was indicated. The French authorities then authorized the service and travel permits and provided transport to each nurse and aid, and the call was answered in a very few hours.

This practically covers the official information on the matter. From the human standpoint, however, it means this: American mothers and wives and sisters whose men were ill, or wounded or died

Fig. 9. Mexican and Indian Americans receiving entertainment outside an American Red Cross recreation hut.

in French hospitals may know that, wherever possible, the American Red Cross followed them, that American women, who spoke their own language, cared for them, and that food and clothing were given them by the American Red Cross, and that everything which was possible to do was done to help their recovery, and, when that recovery was impossible, to bring the comfort of their own people to smooth the way for those who gave their lives to the cause.

I encountered many instances which go to show the wonderfully fine and patriotic service given by these women in the Service de Santé, one of which happened when I first arrived in Paris. I

Fig. 10. Portable sterilizing plant.

was standing one evening in the front hall of our Red Cross nurses' pension, when I heard a taxi drive up, and then two girls entered. They were in trench coats and caps, loaded down like pack mules, dirty, and so exhausted that their eyes looked like burned holes in a blanket. In spite of their appearance they seemed very much alive and happy. Everything was a romance to me at that time, and I gladly retired to their rooms to help a nurse who knew them to get them some tea, and listen to their adventures.

This is the story: They had been sent out on a Service de Santé call, up behind the lines somewhere. The French hospitals are right along the lines of communication. To get there, they had to travel a good part of the night in dirty coaches crowded to suffocation, and then by camion through the intense darkness, and then into a crowded hospital with no light visible. There were two hundred American wounded besides many hundred French.

So they just went to work and helped and did the best they could, and before forty-eight hours were gone quite a lot of our boys had gone west. They stayed five days, working from 6 a. m. till 2 a. m. of the next day, and then for a few hours would cling together in one bed in the barracks to get what sleep they could, which never was much, as the Boches came over every night at some time or other. Just the night before they came in, a bomb had shattered the window of their room and killed the rats in the wall. They were called back to Paris because our men who had lived had all been evacuated to base hospitals. They would get a few days' rest and then go somewhere else where they might be needed.

These are extracts of a few of the letters received by the head nurse of the Service de Santé:

"Arrived safely. We are filling the gap between the charming ladies who care only to help the surgeons with the dressings, and the scrubwomen. We have been scrubbing off the trench dirt and blood that has clung to the boys for three weeks, and we rub backs and make gruels and milk-shakes. There is a most devoted soeur here. She comes on duty at four in the morning and stays until ten at night."

"Envoyez de suite, deux infirmiéres à ————. 200 Américains malades. (Send at once, two nurses to ————. 200 American sick.) (Copy of a telegram.)

"Yesterday was the Fourth of July, and we had a grand féte at A———. The children of the schools came and decorated the beds with small flags and bouquets of poppies. They had made for each American soldier a linen case to hold letters with an emblem on it. They brought cigarettes and cakes and wine, too. We cleared the beds away in one of the wards and set a table with real tablecloth and napkins, and a beautiful bowl of roses, all for the hoys who could sit up to eat. The préfet furnished the dinner. The préfet himself and the sous préfet and the maire, too, all came. We had roast and potatoes, chicken and mayonnaise and cookies and champagne, a fine meal."

Our little Italian boy voluntarily prepared a toast which we translate. The préfet was so touched by it he asked for a copy to keep.

"To those present who represent the grand French republic—We, the Americans present, on the great Day of Independence, wish to express our hearty thanks to the people of this country so brave, and especially to the people of A———. Kindness has flowed in abundance by the people of A——— by the sisters and the doctors of the hospital. We, young Americans, have come from across the sea, leaving everything behind us, hut with smiles lighting our countenance. We come with determination. We come to do for France what Lafayette did for America over a century since. We come to battle by the side of our brave ally, the French soldier. We appreciate the courage and incomparable hravery of the French soldier."

"One hundred U. S. A. soldiers ill. Twenty with pneumonia. Please send help if possible." (Copy of a telegram.)

"Here we are at ———. We have worked night and day since coming. Were both terribly tired from the barrage we had been under. It was impossible to sleep at all during the attack at ———, and it is impossible to get much sleep here. The sights are terrible. The boys are all awfully sick, as only the dying and seriously wounded are kept here. We have no hopeful cases. Miss L. gave out completely today and I am not much better. It is getting hard to hang on."

"There are thirty-one patients here. We have inaugurated a regular system of work and sports for the carriers and convalescents. The Red Cross has been very good to us. The clothing they send gives us a chance to keep the men cleaner than would otherwise be possihle. We hope to get extra food for the men from the American stores, and have already bought jam and sugar for their breakfast and ours."

"One of our French infirmières has been killed and the other one is on permission, so my official title for the moment is infirmière major. We have one very sick little Italian who calls me mama. I am buying fruit and chocolate for him with Red Cross money. There has been no bombardment for several days now and we are beginning to sleep in our own beds again. While the moon was full, every night there was a procession of wheelbarrows loaded with beds and babies, hurrying to get a good place in the *abris*."

"Will you send some cigarettes and chocolate, and prunes or jam if you can? We are away from everything here. One patient in particular, constantly begs for cigarettes, and I have none to give him. Could you send some comfort bags, too? These boys are all badly wounded, and it will be a long time before they can be moved to an American hospital. They were all put off here because their condition was too bad to let them go on."

"No lights are allowed to show here. There were ten of us in one carriage. We faced the blackest darkness I have ever seen. The only way we knew we had reached a station was hecause we stopped. Then heads appeared at windows asking the name of the station. Then if it was ours, we stepped out into the inky darkness.

"We reached the hotel to find the outer door chained and padlocked. Nothing could be made out in the blackness. We went on and finally found another hotel and a room. The next day I found that the hotel where I had first applied had not a pane of glass left in the windows, and another one where I had planned to inquire had nothing left of it standing but its outer walls."

Some of the nurses have found all sorts of living quarters awaiting them. They were often placed in the first vacant barracks. One group, upon awakening after a night of travel and arrival in pitch darkness, found chickens roosting on the foot of the bed, and rabbits sleeping comfortably under it. Another group were kept awake by prowling rats, and were more greatly surprised when morning came to find Chinamen sleeping in the same barrack. Usually, satisfactory arrangements were made the next day.

The nurses in almost all cases were received with the greatest courtesy and consideration by

the French authorities. The food varied with the hospitals. In many cases the nurses were obliged to supplement both the food for their patients and for themselves by buying extra supplies. Extreme cases were known where our nurses were placed in hospitals where the diet consisted for weeks and months at a time of boiled horse meat, lentils, mouldy bread, and sour wine with an occasional bit of cheese.

The greater part of the nurses and aids served under all circumstances of danger and discomfort with the greatest cheerfulness. Their service to our men from home who were handicapped in their recovery by their surroundings was invaluable. In many cases it savored of a genuine heroism. There was rarely an instance where the mèdecin chef and the French authorities did not view their leaving the hospital with the greatest regret because of their kindness to the French soldiers as well as to our own men. The American nurses who served in the Service de Santé proved themselves capable and adaptable and lovable, and left a warm spot in the hearts of the American soldiers and the French soldiers alike.

FROM OUR FIELD EDITORS' NOTEBOOKS

A Hospital Where Detail Counts—Every One Chosen With An Eye to Economy and Efficiency—Dental Department Shortens Patients' Stay in Hospital

Hale Hospital of Haverhill, Mass.

The Hale Hospital of Haverhill, Mass., is now in its thirty-second year and is steadily growing under the leadership of its able superintendent, Miss Emma A. Mortimer.

Aside from the contagious hospital (a modern, well-equipped building, accommodating twenty-five patients), which was turned over by the city to the board of trustees of the Hale Hospital in 1914, the hospital consists of four buildings, connected by a covered passageway. A fifth building, which will accommodate private patients, is being constructed and will soon be ready for occupancy.

The Hale Hospital is fortunate in having an architect who was painstaking in working out details of construction that make for cleanliness, economy of effort, and stability. Much of the older section of the hospital has undergone remodeling and rearrangement, and everywhere a discriminating observer sees that careful thought preceded action. Even the nosing of the stair tread wasn't too small a matter for careful consideration, and rubber instead of metal nosing was installed. It grips the shoe as one descends and is noiseless. All wash bowls and sinks stand 3 inches from the wall. In new hospital buildings, of course, this is not uncommon, but it shows careful planning with an eye to cleanliness.

In the utility rooms the walls are painted for a distance of 6 feet 6 inches from the base, with pearl gray hard enamel paint instead of with a flat paint and are consequently easier to keep clean. Wooden partitions are used in the toilets and utility rooms and the marbloid of the floor is carried up on both sides of the partition about 6 inches to protect the wood against inevitable rotting from the water of scrub mops. It forms a cove base, moreover, instead of a right angle, thus preventing the ready accumulation of dirt. The medicine-closet sinks are so constructed that they can be cleaned with one sweep of a damp cloth.

A great deal of thought was put into the equipment and arrangement of the diet kitchen. Every piece of equipment is placed with a view to rapid work, the elimination of every unnecessary movement, and counter currents of action. The soapstone sink, placed 3 inches from the wall, with a shelf on each side, is just to the left of the entrance, so that soiled dishes can be deposited in it just as soon as the room is entered. After being washed, they can be placed with no needless steps on the shelves just to the right. The height, width, and capacity of these shelves are carefully determined in order to secure the maximum of effective working space within a given area. The dish closet is 7 feet high and allowed to hold only the things in constant use. High closets, with upper shelves hard to reach, offer temptations to make them clutter holes.

The new operating room has been built just back of the old one, which is now used as a vestibule for the operating suite. The terrazzo floor is carried up the walls 5 feet 6 inches and is a delicate bluish gray. The surgeons have a pleasant room in which to foregather, with nearby shower baths and lockers.

The Dental Department of the University Hospital, Minneapolis

The University Hospital has a dental staff and a dental nurse, and all patients who come into the hospital undergo examination for the condition of their teeth. The nurses in training rotate through the service, just as they do through the surgical, the obstetric, and all the other departments. The dental nurse in charge does much toward putting the patients' mouths in better condition before the dental resident sees them. The patients themselves become much interested, particularly when they are able to observe improvement in their own condition, and it is the aim of Dr. Grey, in charge of this work, so to educate each patient, that he or she will not only practice dental hygiene on going out but will be a missionary to spread the lessons learned in the hospital.

One of the striking features in connection with this service is the enthusiasm of the members of other departments for the results of the dental work. Dr. S. Mary White, of the medical staff, believes that attention to diseased teeth shortens the average stay of patients in hospital by 15 to 20 percent—an almost unparalleled contribution to hospital efficiency. The seriousness with which all connected with the dental service take their responsibility is another noticeable thing. I might add that a third outstanding fact is the kindness and courtesy shown to the patients. Indeed, many patients paying extravagant prices for private suites and nurses might envy the patients in these wards overlooking the beautiful heights of the Mississippi River.

The MODERN HOSPITAL

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The Training of Medical Hospital Superintendents

What motives or what processes of thought influence medical men to take administrative hospital positions? Do many of the younger men who enter medical college think, when embarking on their scientific course, that it is to lead them into a life work of hospital management? Yet an increasingly larger number of medical men each year go or drift into administrative work. Is their action the result of choice or accident?

The industrial and business worlds have by experience developed definite composite character standards for successful executives. The basic requirements of forcefulness, clearness of mind, quick decision, and firmness apply as much to hospital superintendents as to managers of industrial plants or of business organizations. Fundamentally the problem is the same: to produce the maximum amount of service at the minimum amount of cost.

The reservoir of men from which the business world has to draw is very large. The hospitals are restricted to a comparatively small group, first, because they cannot compete with business concerns in payment of compensation; second, because they require of their managers a considerable amount of technical knowledge which is very seldom possessed by persons without a medical education. Although many lay persons have proven themselves to be excellent hospital superintendents, the modern tendency is unmistakably toward limiting the field to graduates of medical schools. Their "right to monopolize" hospital management is on par with the "right" of engineers and chemists to manage industrial plants. But right involves responsibility, and this leads to a consideration of the problem of training medical men for administrative duties.

Prior to our entrance into the Great War some of our medical schools adopted the five-year course. The application of the new curriculum was postponed on account of the war exigencies. The post-bellum period of reconstruction will give added momentum to the movement for a prolonged medical course. The majority of our first-class schools will add the fifth year and will devote it chiefly to bedside instruction in hospitals. Students desiring to devote themselves to a career of laboratory research will probably be allowed to utilize the additional year in the laboratory instead of in the hospital wards. Likewise, those wishing to select the field of public health for their life's work ought to be given the opportunity to specialize in studies that will fit them for their selected tasks. Is it not feasible to establish a special course for those who would wish to fit themselves for the duties of hospital managers? The very existence of such courses would act as an axis of crystallization for those students who feel more or less indistinctly a preference for executive work in hospitals over the practice of medicine.

The courses offered would embrace such subjects as business management, efficiency tests, the science of accounting and finance, the understanding of values in the many kinds of goods in which the hospital is interested, and then, of course, instruction in the problems of hospital management. The last-mentioned will be conducted by successful hospital administrators, with whom arrangements could be made to teach the students at the hospital and put them to practical tasks. One year's study will not, of course, develop young men into mature executives but it will serve two purposes: (1) it will eliminate those who are unfit for executive positions and save them future failure; and (2) it will give an opportunity to those with executive abilities to train their native faculties for the successful discharge of their duties in the future. Many hospitals will be glad to avail themselves of the services of these partially trained graduates who would be more valuable to them from the very outset than persons who had had no administrative training whatever and are unfamiliar with hospital problems. At the same time the young

graduates will be enabled from the beginning to earn a definite salary and that in a position which will lead to further advances along those lines in which they desire to specialize.

The suggestions made in this article are offered solely in the hope that they will promote a discussion of the subject. It may be that the suggestion of linking hospital management courses with medical college curriculums is not practical; it might perhaps be better to establish training schools in connection with some of the hospitals, just as we have training schools for nurses. The subject, however, is a vital one and deserves careful thought and discussion.

E. H. Lewinski-Corwin, M.D.

The Hospital and Its Board of Trustees

Every hospital that wishes to maintain ideals of efficiency or service to the public, every hospital that has anything to ask of the public, needs to consider well the work and the relations of its board of trustees. Are the trustees interested? Are they doing their share? Do they even understand the service which the hospital is rendering or should render to the public? If not, why not?

The duties of the trustees have never been standardized—scarcely even clearly defined. In some institutions, owing to this lack of definition, the relations of the superintendent and the board are antagonistic; in others, they are negative. The work of the hospital is hampered in the one case by friction, in the other, by the deadweight of an uninterested and indifferent board.

This condition is one of transition. Whether or not the trustees, in any particular case, realize it, they have a responsibility—say rather *the* responsibility—for the conduct of the hospital. This responsibility does not mean, of course, that they should interfere with the superintendent or the staff in the performance of their respective duties. All trustees realize that it is not their function to prescribe the medical and surgical treatment to be given the patients in the institutions, and most of them realize that it is just as little their place to give orders to the housekeeper or the steward, or to limit the superintendent by petty, nagging rules and interferences.

That the trustees should leave the medical and administrative work to experts is sound doctrine; but this is not the end of the matter. After all is said and done, the trustees are trustees; they, and not the medical staff, and not the superintendent, are responsible to the public for the efficiency of the institution and the character of work done in it. It is possible to dodge board meetings, but it is not possible to dodge responsibility for what is there done or left undone. Some day this is going to be recognized, and dummy hospital trustees are going to be just as sternly called to account as dummy bank directors have already been. When the searchlight shows up conditions by which the public health and safety is endangered in the very institution which is supposed to exist for the purpose of protecting it, the trustees are not going to escape accountability by pleading that they "supposed" everything was all right.

But, if the superintendent is responsible for administration and the staff for treatment, what is left for the trustees? The highly indispensable function of seeing that these and all other responsibilities are properly met. There used to be—and perhaps there still is in some quarters—a feeling prevalent in the medical and administrative staff, that a board of trustees, except so far as it was necessary for the raising of money, was a concession to convention, which made itself an active nuisance in proportion as it took itself seriously. The best board of trustees was the one which approached the nearest to being a nonentity. A superintendent who knew his business should not be called to account by a non-expert body like a board of trustees; no more should a competent medical staff.

The tendency of the expert to resist and even to resent lay control is natural and perennial; it is justified wherever the layman presumes to pass judgment on technical method; it is not justified where the layman asks for an accounting on results. The expert, be he or she a cook, a chauffeur, a lawyer, a physician, or a nurse, is the servant of the lay public or some portion thereof, and, as such, is answerable for results. We may not be able to instruct our cooks how to make a pudding, our chauffeurs how to run an automobile, still less our lawyers how to handle our legal business and our physicians and nurses how to handle our cases of illness. We are, however, justified in demanding of any of these experts that they continuously show us proof of their competence. It is good for them; it is good for any of us to know that we are thus continuously held to accountability—that our good work is appreciated and our bad condemned. And, while a layman is no more capable of judging the professional competence of a physician by watching his work than a depositor is of judging the solvency of a bank by observing the cashier at his work, we are indebted to a professional body, the American College of Surgeons, for emphasis on the fact (previously pointed out by E. A. Codman) that physicians and surgeons, like everyone else, can and should be expected to render an

account of the results of their work, in terms that can be understood by the non-expert.

Now, to go back to hospital boards; the duties of its members are defined by their title. They are trustees of the public for the safety and welfare of every one within the walls of the institution. Are the residents exposed to the danger of fire? If they are, the trustees cannot escape responsibility by pleading that the building was erected before their time, that they supposed the architect had provided against fire, or that it was the superintendent's duty to see that no inflammable material was exposed to the danger of sparks; it is their duty to know. Are the patients receiving proper medical and nursing care and proper food? It is the duty of the board of trustees to know that nothing is neglected that conduces to the welfare of the patients in the first place and of the other dwellers in the hospital in the second.

Nor does this mean that the trustees are to stand over the administrative and medical staff as policemen. Rather does it mean that they are to strive to understand the work of both and to encourage them by appreciating what is well done. As trustees, stewards for the public, they can not remit their insistence for an accounting from those responsible under them; but this insistence need not and should not imply distrust. Where the true principles of hospital organization are understood, it should mean the friendliest and most harmonious cooperation among board, administrator, and staff. In this connection, Dr. Freiberg's article on this subject on page 15 may be read with profit.

The Education of the Board of Trustees

We have outlined in the preceding editorial some of the duties and functions of the hospital board of trustees. If, in any given case, the board is not fulfilling these duties and functions, what is the reason? Generally speaking, lack of insight into the true relations of board and hospital. The board is usually drawn from the best elements in the community. All that the trustees need, to fit them to be the formulators of wise policy and the valued advisers of the superintendent in its execution, is education in hospital principles. How shall they obtain this education?

In the first place, of course, they must learn, through faithful attendance on board meetings and through contact with the superintendent and staff, their own institution and its needs. This is not enough, however; they can not know their own hospital adequately if it is the only one they do know. For the broader view necessary to enable them to judge their own problems in the light of the experience of others, there is nothing like attendance on hospital association meetings —the hospital association of their own state if the state has one, but in any case and by all means, the American Hospital Association. At least one member of every board of hospital trustees ought to attend every meeting of the national hospital association. If he attends as one of the accredited delegates of his own institution, so much the better; and, by the way, this is a good opportunity to present again the advantage to the hospital of institutional membership in the American Hospital Association.

It would be highly desirable if every institution in the United States which is eligible would take out institutional membership in the American Hospital Association, and, furthermore, take full advantage of the privilege of being represented by three voting delegates. If each hospital were represented at the next meeting by its superintendent, one member of the board of trustees, and one member of the medical staff, the profit to each institution in broadening the point of view of all three elements in its organization —in obtaining light from three angles on its problems—would be almost incalculable.

Progress of the Standardization Work of the American College of Surgeons

The "News-Letter Concerning Hospital Standardization," recently issued by the American College of Surgeons, and quoted on page 45 of this issue, gives an interesting review of the results thus far accomplished by the college. The reports made on individual hospitals during the survey of seven hundred institutions conducted by the college indicate an exceedingly valuable and instructive piece of work. The publication during the current year of the full report of the results of these visits, with classifications of the hospitals of one hundred beds or over, is promised.

The reaction of the hospitals toward the campaign of the college has been most interesting to observe, and no less interesting has been the reciprocal effect of this reaction on the campaign. The selection of the name "hospital standardization" for a movement directed toward reform in medical and surgical practice was, at the outset, unfortunate. The principles of "standardization" set forth by the college are so indubitably and irresistibly right that it is impossible for any candid person to refuse assent to them. Yet, while the principles are accepted, the name "hospital standardization" has aroused an undercurrent of

somewhat resentful misunderstanding—among the stronger hospitals, because of the feeling that they were to be "standardized" on a basis which took no account of a large and essential portion of their work—among the weaker institutions, long dominated by their staffs, because of the impression that they were being used as whipping boys for the sins of their masters. Probably only the exceptional tact, vigor, and skill with which the proposition has been presented to the public and the hospitals has brought it within measurable distance of the success which fundamentally it deserves. The present attitude of hospitals toward the movement is perhaps reflected in a resolution, presented at a recent hospital meeting, where the question was discussed with keen interest and considerable frankness, that the organization endorse "the standardization of *medical and surgical practice in hospitals*" (these words were emphasized by the mover of the resolution) advocated by the American College of Surgeons.

The greatest success of the campaign has apparently been among the larger hospitals—at least, this might be inferred from the fact that the college has not signalized any intention, as yet, of publishing statistical results among those of less than one hundred beds. Among the larger institutions, there are several which have put the standardization program into effect with results which excite well-founded enthusiasm. Little or nothing is said, however, about what the smaller hospitals are doing. Indeed, those administrative heads of small institutions who earnestly approve and desire to follow the ideals set forth by the college, have been somewhat disappointed by its failure or omission to give serious consideration to the problems which seem so trifling to outsiders but which are after all, vital to the hospitals themselves. The college, in their view, points out the steep and thorny way to heaven, but, when asked, "What about bread and butter on the road?" replies, "Trust in the Lord," or words to that effect.

In most of the smaller communities, at present, the dominant force in matters pertaining to health and the care of the sick is not the hospital, but the local medical profession. The hospital, if it is not owned by a local surgeon, is usually, in one way or another, controlled by some member of the local profession. Under these conditions the superintendent, in order to enforce the formula of righteousness prescribed for the salvation of all hospitals, must possess either a burning faith which enables him or her to disregard the sordid question of tomorrow's dinner, or the secret of making soup from cobblestones.

That the college has not yet brought the New Jerusalem down to earth should by no means be reckoned as failure. On the contrary, it has done a wonderful piece of work. It has presented with irresistible force to the public, to the medical profession, and to the hospitals certain ideals to which they dare not openly refuse allegiance. It has even been able to demonstrate their practicability in certain classes of institutions. If it has not yet solved the problem of the small hospital —well, the possibilities of the small hospital are still uncharted and unsounded seas. That so much has been accomplished, in the face of a rather heavy initial handicap, speaks eloquently for the brilliant propaganda conducted by Mr. Bowman, the director of the college, and Father Moulinier, president of the Catholic Hospital Association. Indeed, it seems possible that the future may show results as yet undreamed of.

An Interesting Experiment in the Construction of a Maternity Ward

Extensive experience in maternity work has led Dr. Alfred Baker Spalding, of the Lane Hospital, San Francisco, to believe that the unbroken quiet of the maternity ward may have its disadvantages. The convalescence of the mothers may be retarded by anxiety about their babies, invisible and inaudible in the nursery. Furthermore, the mother learns nothing about the proper care of her child from what is done for it at the hospital. Dr. Spalding believes that it is a good thing for the mother to be able to see her baby, and he has therefore partitioned off one corner of his maternity ward at the Lane Hospital for a nursery. A further evolution of the same idea is seen in the plan of the maternity pavilion at the Cottage Hospital of Santa Barbara, described on page 14 by Mr. Winsor Soule, the architect, who is also a director of the institution.

As will be seen by reference to the plan, the nursery has been placed in the center of the ward, from which it is divided by double glass partitions. At one end is the babies' bathroom, so placed that the mothers can see their children being bathed, and at the other the nurse's station. The glass partitions between the nursery and the ward are intended to muffle but not entirely to deaden the sounds, as it is part of the mother's education to learn that the baby must not be fed every time it cries.

An innnovation so radical as this inevitably arouses inquiry. Among the first questions which come to mind are these: Is the provision for direct sunshine and air in the nursery adequate? And, since the women lying in bed cannot see the babies in their cribs, does the proximity of the

nursery to the ward compensate for the disturbance of the mothers by the crying of the children at night?

In any case, the experiment is most interesting, and the results should be instructive. It would be instructive, also, to know in how many other hospitals an attempt is made to educate the mothers, before they leave the hospital, in the care of their children, and the means employed.

A Carefully Studied Plan for a Tuberculosis Sanatorium

Like the other plans for sanatoriums erected under the guidance of the Minnesota State Advisory Commission, the plan for the Riverside Sanatorium at Granite Falls, described on page 17, is worthy of careful study. The arrangement and detail of the various parts give evidence of the consideration given to the comfort and convenience of the patients and to economy of management. The cubic-foot costs given are low, by the way, but the cubic capacity is high, making the cost per bed relatively high—$2,006.

An interesting criticism made of these plans is worth quoting, for the sake of an instructive reply received from the commission. The critic writes:

"It is treading on thin ice for anyone to question the dicta of the Minnesota State Tuberculosis Advisory Commission, but it does seem that the large percentage of ten-bed wards (thirty beds out of forty-five) needs some explanation. The experience of almost every community has been that the public sanatoriums receive a large majority of advanced cases, a few moderately advanced, and an occasional incipient. Their patients, therefore, will require a long period of treatment, in the sanatoriums if they are to be benefited. Most sanatoriums have found that patients will not stay for three to six months except under the most favorable conditions, and that the small ward is imperative if the institution is to be successful in its purposes. It is hard enough to keep two people together for months in total idleness, but the task of keeping ten contentedly together in enforced association for any length of time appears superhuman."

Dr. Robinson Bosworth, executive secretary of the State Advisory Commission, replies:

"While it is true that public sanatoriums receive advanced cases in a large majority, it is not our experience that necessarily these advanced cases must be in private rooms. We do not place our patients in private rooms because of the stage of the disease *per se*, but because of the fact that, irrespective of the stage of the disease, they may do better for special reasons or may be less objectionable to other patients, or may receive special treatment needed which could not be so well accomplished in the open ward with other patients. It is our experience that patients prefer company. We see this shown conclusively when a patient is moved from a ward to a private room. We have endeavored to provide 20 per cent of the capacity of all our sanatoriums in rooms, 80 per cent in wards. The comment made in the criticism that most sanatoriums have found that patients will not stay from three to six months except under the most favorable conditions, I am pleased to answer from last year's monthly report of the institution described in the article; the average length of residence was six months, so that its conditions must have been fairly satisfactory."

Incidentally, apropos of the critic's reference to the difficulty of keeping "people together for months in total idleness," it may be mentioned that the commission is employing an occupational director, whose work, though only just begun, seems likely to be very successful. An abstract of a paper by Miss Beatrice Lindberg, the director of the work, appears in the report of the recent meeting of the Minnesota Hospital Association, p. 53.

An Asepsis Number of The Modern Hospital

The world has come a long way since Joseph Lister first presented his discoveries in asepsis to a bored and inattentive audience in the theater of a London hospital, but it has gone ahead on the basis of the same theory which, once Lister's ideas were accepted, reduced the average mortality from operations from 40, to 2 or 3 per cent. Five papers on asepsis make this issue of THE MODERN HOSPITAL noteworthy. The first, Sir St. Clair Thomson's account of Lister's years of struggle and discouragement and his final triumph, is something of a revelation to a younger generation to whom asepsis is the commonplace of hospital practice. The second, Dr. D. L. Richardson's paper on "Aseptic Nursing in American Hospitals" (the third in his series), deals with efforts to avoid cross-infection in the hospital management of contagious diseases. The other three papers—"Present-Day Meaning of Surgical Asepsis," by Dr. A. E. Hertzler; "What Is Meant by Surgical Asepsis?" by Dr. A. Nelken, and "Fighting the Bacteria That Cause Infection," by Dr. F. J. Hall—are practical discussions of technique, common errors, and effective precautions, which should prove valuable to the administrator who wishes to understand the principles which should be followed to avoid what Dr. Nelken calls "that purgatory of the conscientious surgeon [and the self-respecting hospital]—infection following a 'clean' operation."

A New Hospital Bulletin

The Catholic Hospital Association has decided to issue a bulletin in which the proceedings of its meetings will be published together with news of the activities of Catholic hospitals in Canada and the United States, and other timely matter of interest to Catholic hospitals. The details of the publication are to be formulated by a committee appointed for this purpose. Whatever form the proposed bulletin may take, we are glad to extend to it a hearty welcome.

THE LATCHSTRING OUT

CAPT. DR. RENÉ SAND of the University of Brussels pulled THE MODERN HOSPITAL latchstring on a recent visit to Chicago. Dr. Sand served during the war in a hospital at the front, and, with the return of peace, his interest is centered in the reorganization of medical education in Belgium, and particularly in the extension of industrial and social medicine. A new interest in industrial welfare has been created in Belgium but, of course, the whole plan is handicapped by the devastation of five years. In an article entitled "Suggestions for an American Foundation in Belgium," appearing in THE MODERN HOSPITAL for May, on page 317, Dr. Sand described his hopes for this work and the means by which America may serve it.

One particularly interesting and inspiring phase of this work, described by Dr. Sand, is the assistance and support given it by the unofficial government of Belgium during the years of the German occupation. This government had no authority, but everybody obeyed it. Whole communities which conducted affairs instituted state medicine, and everyone had free medical service.

Dr. Sand is an alert man who has caught the new vision, and he promises to be an important figure in Belgian reorganization. He acts as medical advisor of the Ministry of Labor in addition to attending to his duties in the medical school.

CAPT. JOSEPH PURVIS, lately chief of the section of hospital administration service, intermediate zone of the American Red Cross work in France, has just returned and is about to take up civilian hospital work again. Captain Purvis says that it is difficult in this country to form any idea of the extent and value of the work performed by the Red Cross, both for the armies and for the French civilian population. At Lyons, where Captain Purvis was stationed, the Red Cross is carrying on extensive work for tuberculous women and children.

DR. ROBINSON BOSWORTH, executive secretary of the Minnesota Advisory Commission of the State Sanatorium for Consumptives, on a recent visit to our office, called attention to the important work in the standardization of tuberculosis sanatoriums then in contemplation by the American Sanatorium Association, the National Tuberculosis Association, and the Mississippi Valley Conference on Tuberculosis. Since that time, committees from these three associations have met and made an exceedingly important report and suggestions which will be found on page 58 of this issue. Dr. Bosworth has favorable results to report from the work of Miss Beatrice Lindberg, industrial worker for the commission, who is employed to make the rounds of the fourteen county sanatoriums under the commissioner's jurisdictions, in order to instruct the patients and interest them in occupations.

MISS MARGARET J. ROBINSON, who has been with the French Commission of the American Red Cross at Paris headquarters, and whose articles on French and American hospitals in France have been appearing in THE MODERN HOSPITAL, has just returned to this country. She is enthusiastic about the work accomplished by the Red Cross for the American Army and the suffering people of France. The work of the Red Cross will be continued through the League of Red Cross societies, which, when it reaches its complete function as planned, will probably be the greatest single organization for human betterment which has been conceived. Miss Robinson has recently completed, under the supervision of Major A. H. Garvin, chief of the department of health and the Bureau of Tuberculosis of the American Red Cross in France, a definite study—perhaps the first of its kind—to determine the amount of hospitalization needed in communities of a definite population. A typical department of France was selected for this study.

THE FREE PUBLIC HOSPITAL MOVEMENT*

The Canadian Prairie Provinces of Saskatchewan and Alberta Enact Advanced Hospital Legislation

A very strong movement for free public hospitals, especially for the rural districts, has been sweeping the West. There has been an increasing demand that provincial governments assume a greater measure of responsibility for public health. This has, no doubt, been brought about by what has been accomplished by the military medical departments. It is urged that if a complete medical and hospital service can so improve conditions among soldiers, an equally complete service for civilians would have the same result.

Each of the prairie provinces, in response to this agitation, has enacted legislation. Saskatchewan and Alberta have passed hospital acts providing for public hospitals to be controlled and financed by the taxpayers of the districts which they serve. The Alberta act is considered the most advanced measure enacted anywhere in Canada. It recognizes more fully than the Saskatchewan act the primary responsibility of the government, and provides a scheme of organization closely paralleling that for education, in which the government assumes the initiative in all organizations. The Alberta act lays the foundation for a system of hospitals as complete and gratuitous as the public schools. It is based on the principle of the direct responsibility of the state for maintaining the health of each and every citizen. The office of minister of municipal affairs is combined with health matters. Alberta has paved the way for a revolution of the present methods of safeguarding health; it provides the minister of health with adequate machinery to carry out a progressive democratic policy for complete nationalization of health within the boundaries of the province.

The act provides for alternate initiative by the minister and the ratepayers. This prevents action by the government before the ratepayers of a given district are ready for action, but gives the minister full general supervision over the administration by the local boards of each district. The minister establishes the districts; the ratepayers, by petition, set the machinery of the act in motion, the district board then assumes the executive, establishing a hospital having the benefits of provincial architects, medical staff to advise them as to plans, costs, etc., and the scheme is submitted to the ratepayers. Individual ratepayers have access to the Board of Public Utility Commissioners for redress for a wronged minority. These commissioners also adjudicate on disputes as to site when the various sections of the district fail to agree. Formerly many municipalities had endeavoured to combine by mutual agreement to form hospital districts, but, with the exception of Lloydminster, the plan failed owing to dispute over sites, the inertia of one municipal council or the hostility of another. By the present act it is believed Alberta will be much better served, as many local improvement districts would have been left isolated owing to financial inability to participate in the organization of the district to which it naturally belonged. The Alberta act differs from the Saskatchewan act in that the latter does not provide for such extensive government initiative.

*From the Canadian Medical Association Journal.

While the Saskatchewan act permits municipalities to unite to form hospital districts, the Alberta act provides that the government shall lay out suitable districts without regard for municipal boundaries and having regard only for the necessities of the hospital. It is designed to enable the government to progress in line with the progress of public opinion, and it leaves to public or voluntary initiative only as much as is absolutely necessary to preserve local autonomy.

HOSPITAL STANDARDIZATION INVESTIGATION BY AMERICAN COLLEGE OF SURGEONS

Staff Organization, Case Records, and Clinical Laboratories the Subject of Inquiry—Visits Paid to Seven Hundred Hospitals

A recent news-letter published by the American College of Surgeons contains an account of the work which the college has done and is doing to further the cause of hospital standardization, from which the following extract is drawn. The subject is commented on editorially on page 42.

"At this time, about seven hundred hospitals have been visited by staff members of the college. The reports of the visitors, together with the action taken, are recorded upon cards printed for the purpose, and are specific as to the following 'minimum standard':

"*Staff Organization*—Extent of analysis or review of professional work; regularity of meetings; reorganizations contemplated; evidence of staff team-work, research, education of interns, etc.

"*Case Records*—Data as to medical, surgical and obstetrical case records of all classes of patients treated in the hospital; methods of recording, classifying, filing, etc.; contemplated changes.

"*Clinical Laboratories*—Equipment of the laboratories; number and training of the laboratory workers and technicians; extent to which adequate laboratory service is provided; supervision given interns doing laboratory work.

"A letter to the superintendent precedes these visits, outlining its object and stating the approximate date of visit. The visitors, of course, seek first of all the assistance of the superintendents in this work. And before each visit ends, the entire standardization program usually finds its way to the local Fellows, internists, staff groups, and members of the board of trustees. The frankness of all concerned with the hospitals in stating their problems and their willingness to consider these problems with the visitors of the college are a constant encouragement.

"The following is one of the many reports made for the college by Mr. Frank E. Chapman, this report being an addition to the regular report on the minimum standard:

"The x-ray equipment is very complete with an exceptionally bright and intelligent technician on duty at all times. Volume of work is not large but the character is very good. Do not believe it is being used as much as it should be. The hospital has a technician in charge of the laboratory. Not equipped to do Wassermanns; from the conversation I had with the technician, I do not think she is equipped to do laboratory work of any kind. There is no such thing as routine laboratory work. Very little pathology is done and that only when special charges are made.

"The deplorable thing about the hospital is the general atmosphere of the place. It is a business proposition from start to finish. Pupil nurses are permitted to do special work even in the first year of their training, for which the hospital charges and collects the fee. This institution is operated in conjunction with two other hospitals of the state, all of which are on a par.

Again, the following, somewhat condensed, is one of the reports made by Miss Anna C. Phillips:

"*Capacity*—160 beds. Private charitable institution.

"*Type*—Medical, surgical, obstetrical. Number interns, three. Number pupil nurses, seventy-two.

"*Staff Organization*—A loosely organized group. Regular meetings not held. Any physician in good standing may bring patients to wards or rooms. No regulations.

"*Laboratories*—Well-equipped, clean, light, laboratories in charge of part-time, trained workers. Pathological laboratory under-staffed and interns do laboratory work without supervision. No laboratory records kept which would indicate volume of work.

"*Supplementary Report*—Hospital located in quiet residential section; car line near. New fireproof building surrounding three sides of large open court gay with flowers, shrubs, etc. The low, broad lines, balconies facing the court, and the general impression of brightness and comfort, reflect definite planning and thought. Atmosphere dignified and prosperous. A sense of confusion in the wards is probably due to the numbers of doctors attending and the varieties of treatment ordered for the same types of cases. Staff has been dissatisfied with existing organization, but has found difficulty in inducing the trustees to assume responsibility regarding establishment of definite rules and regulations. The teaching in the local medical school is not strengthened by the standards existing in this hospital. Duplicate report left with chief of staff for presentation to board.

"During the current year a full report of the results of these visits will be made by the college, and classifications of the hospitals of one hundred beds or over will be published in accordance with the findings of the visitors."

THE IMPORTANCE OF THE LABORATORY IN THE HOSPITAL

It Promotes Good Medical Service—It Encourages Good Internists—It Creates Public Confidence in the Hospital

A strong plea for better hospital facilities was put up by Dr. J. M. Baldy in an address published in the *Journal of the Medical Society of New Jersey*. Just as, in a sense, the operating rooms created surgeons, the laboratory will create the internist. Fifteen years ago it was rare to find a good surgeon outside of a great city—now practically every large community has one. The development of the operating room has given him a chance to develop. Of course, too, the action is reciprocal, and it was the surgeon's demands that brought the well-equipped operating room into being. The internist is in the same position as the surgeon was fifteen or twenty years ago.

Pennsylvania's experience with laboratories is enlightening. There were not more than fifteen or twenty pathological laboratories in the whole state a few years ago; today there is not one hospital that has not a laboratory. Not all these laboratories are of the best, but all have equipment sufficient for clinical medicine, leaving out research and advanced work, and all have trained laboratory workers. In consequence a group of men is growing up who long to devote themselves to scientific work, and who are giving up clinical work and visiting the best laboratories for short courses in order to prepare for the future. "Pitiless publicity" is the means which has been most generally used in bringing hospital superintendents to recognize the necessity for installing laboratories.

Dr. Baldy also stresses the function of the laboratory as an educational feature and, in consequence, as a means of creating public confidence. "The day has long gone by," he says, "when we look upon a hospital as simply a place in which to care for the sick. . . . The education of the coming medical men, of the staff men, of other doctors in the town, and of people in the community . . . is also the function of the hospital." This aspect of the case is

very important to the public, for, as Dr. Baldy says, "without the educational feature as a safeguard, it is absolutely certain that the patient is not well cared for." He believes that the public realizes this, and that its confidence increases with the increased responsibilities of the hospital. "Any person," he says, "who . . . sees the laboratory tests that are done and the intensive study given the case is not going to have himself treated by prescription writing."

But the great service of the laboratory is, of course, that which it renders to the medical profession itself. "It is not only important," says Dr. Baldy, "it is the salvation of the practice of medicine; it is the educator of the future internist."

Dr. Baldy makes short work of the practical objections to maintaining laboratories. There will be no difficulty, he thinks, in finding the personnel to man them. Young men come out of the medical schools trained in laboratory work, and, in the small towns to which they go, find no opportunity to practice medicine as they have been taught. They will welcome an opportunity to work in an institution where a laboratory is maintained. A laboratory can be put in at the cost of $1,000, and the hospital which is not able to afford this in order to do better work is too poor to be a hospital. A technical assistant can be secured for a moderate price, since he does not need the training which would be required to read the results of his tests.

So important has the laboratory element been found in army work that the Council on National Defense suggests for hospital interns one year in the laboratory instead of one year in the hospital. In Pennsylvania two full months' laboratory service are required of the intern in which he is to do nothing else, and no deviation is accepted from this rule.

A LEAGUE OF ALLIED HOSPITALS

To Erect Hospital in Belgium To Provide a Place for Research and To Perpetuate Surgical Advance Developed in the War—A Memorial to Edith Cavell and Marie de Page

A league of hospitals in allied countries, the chief of which will be a memorial hospital to be erected in Brussels, to the memory of Edith Cavell and Marie de Page—such is the plan which has been announced by Dr. Antoine de Page, head of the Belgian Red Cross.

The purpose of these hospitals is to perpetuate the methods of surgery which have been developed during the war and to provide a place where surgeons of allied countries may go to do research work, for which, formerly, they would have gone to Germany.

It seems particularly fitting that the memorial should commemorate the splendid lives and tragic deaths of these two women. The story of Edith Cavell, who was shot by the Germans as a spy, in 1915, has become international. During her trial before a prejudiced court and when she was hurried before the firing squad to die, she seemed to incarnate the calm, undaunted spirit of her people. And against her, who exemplified that barrier which prevented Teutonic dominion of the word, they vented their hate.

For eight years before her death she was matron of Dr. de Page's clinic in Brussels. Later she was head of the school of nurses which the doctor's wife established in the Belgian capital.

Marie de Page, who like Edith Cavell, is a heroine of the great war, went down on the Lusitania. Madame de Page was carrying with her from America Belgian relief funds. Her body was washed ashore on the Irish coast and was buried on the beach at La Panne, four miles back of the Belgian lines, where Dr. de Page had his headquarters.

It is to these two victims of German warfare that the Edith Cavell-Marie de Page Hospital will be erected. The hospital, by continuing the use of the surgery which has been put into practice during the war, will be of inestimable value to surgeons from all the allied countries, who wish to do advanced research work.

A sort of reciprocal system will be established automatically whereby surgeons from non-Teutonic countries will not only be welcomed to the hospital for advanced study, but surgeons from the league will be received gladly in all the hospitals of allied countries.

A definite international organization for the league has not yet been effected. However, leading surgeons in Belgium, Great Britain and America are cooperating.

The league of hospitals, while it will always operate for the advancement of surgery in allied countries, will at the same time be a barrier against a Teutonic invasion of that surgical world. All German scientists will be barred from the allied laboratories.

Considerable interest in the international hospital project is being aroused by Dr. de Page, who is touring America with his companion, Captain Joseph Van de Velde. The idea has already been announced in Great Britain, where the cause is being promoted by Lloyd George and Herbert Asquith. They are sponsoring the British memorial for which Great Britain has assumed half the expense. This leaves the rest of the obligation for Belgium to meet. Such a burden rests heavily upon Belgium, which is bled poor by the war. It is to be hoped that America will want to help in erecting the memorial.

"I am here to express to the American people my deep appreciation of the help they have given us during the war and to endeavor to interest them in the construction of the memorial hospital which is being erected to the memory of Edith Cavell and Marie de Page."

In these words, Dr. de Page expressed the purpose of his mission to America. Besides being head of the Belgian Red Cross, Dr. de Page is professor of surgery at the University of Brussels. He bears the rank of colonel in the Belgian army, where he has seen four years' service.

Early in the war, Dr. de Page built a large hospital at Vinckem, on the Yser, six miles from the front lines. It was considered a foolhardy enterprise at the time. People said that it could be wiped out by a small German advance, but, in the allied advance of September and October, this hospital was the salvation of the Belgian army.

Dr. de Page is most grateful to the American Red Cross for their splendid cooperation not only in this instance, but in the years of assistance which they have given to Belgium throughout the war. The hospital at Vinckem was a tremendous success.

The advanced surgical methods which Dr. de Page employed here astounded the medical world. It is said that two weeks after an amputation a soldier would be walking about on artificial legs. Dr. de Page himself has declared that he knows of many cases in which men who had suffered partial amputation of the hands were at work with tools within fifteen days. He explained that the muscles which adjoined the artificial limbs were put into action before they had time to stiffen and become useless.

During his tour Dr. de Page is explaining some of the technical features of his work to American surgeons, who are interested in the international league. The interest which is being shown will do much to strengthen even further friendship between the scientific men of all the allied countries.

HEALTH AND MODERN INDUSTRY

Conducted by BARROW B. LYONS
Superintendent Delaware Hospital, Wilmington, Del.

A WELL-DEVELOPED PLAN OF HEALTH ENGINEERING

How the Colorado Fuel and Iron Company Develops Healthier and Happier Families of Working Men and Women

"Doesn't that engine need oiling"? the visitor asked the factory superintendent.

"Perhaps it does," replied the superintendent, "but I

Fig. 1. Main entrance to the grounds of the Minnequa Hospital of the Colorado Fuel and Iron Company, at Pueblo, Colo.

haven't had time to look it over. Anyway the price of oil has gone up and it would cost fifty cents to lubricate the machine properly. I think we will just let it run until the crank shaft bearings have burned out and then shut the plant down a couple of weeks and rebuild the engine. It won't cost more than a few thousand dollars."

Probably no conversation like the one recorded above ever took place. That system of care for machinery would not be advocated even by the most ardent Bolsheviki, but in caring for men and women too many superintendents and employers in the past—and a few even at present—have followed methods little more enlightened.

Fig. 2. A glimpse through the shrubbery of the Minnequa Hospital

Disregarding for the moment ethical and humanitarian considerations, can anyone fairly estimate the economic loss involved in letting the labor force of a corporation become ill, or, what is perhaps worse, in allowing men and women to work day in and day out while suffering discomforts which render them listless, inefficient, and liable to accidents?

The service of industrial medicine and surgery in healing the sick and restoring the injured is important indeed, but much more so is its service in preventing disease, teaching hygienic living, and keeping the worker and his family physically fit.

In both the curative and preventive departments of industrial medicine, The Colorado Fuel and Iron Company, with twelve thousand men employed in its twenty-odd coal and iron mines in Colorado and Wyoming and in the Minnequa Steel Works, Pueblo, Colorado, has adopted advanced standards.

The company's medical department was founded almost simultaneously with the beginning of its operations nearly forty years ago. The department has its headquarters in the Minnequa Hospital, Pueblo. This institution for years has been accorded merited recognition as one of the most advanced industrial hospitals in the United States. The staff of surgeons at the hospital is supplemented by the services of physicians in the various mining towns. Adjacent to the steel works at Pueblo is a dispensary for the treatment of minor illness and injuries. The company has

Fig. 3. View of the Minnequa Hospital from its spacious lawn

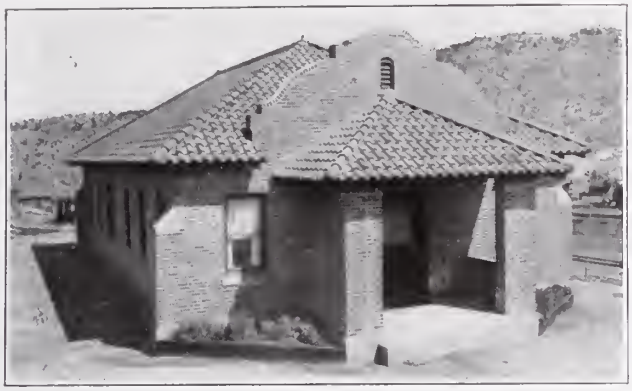

Fig. 4. Dispensary maintained by the Colorado Fuel and Iron Company at the iron mining town, Sunrise, Wyoming

inaugurated a program of building dispensaries or emergency hospitals at the mining properties. Two of these already completed, one at the coal camp at Primero and the other at the iron property at Sunrise, Wyoming, were donated to the people of the camps by John D. Rockefeller, Junior.

At the steel works and at several of the mining towns, visiting nurses are employed. These nurses care for ill and injured men in case of emergency, but their principal function is in teaching the principles of hygienic living and housekeeping according to American standards to the wives and families of the miners. Within the past year the company has cooperated with the counties where its mines are located in employing public health nurses under the supervision of the American Red Cross.

For the benefit which he and his family derive from the medical service, each employee pays one dollar per month. The fund thus raised is supplemented by appropriations from the company. Employees are entitled to hospital treatment in case of injury or serious illness and to medical service at their homes. In the case of workmen living at the mining camps, free medical attention is also extended to their families. Hospital treatment is not furnished to families of employees free of charge, but a reduction from regular rates is made for their benefit.

More than two years ago a decided innovation was inaugurated in the shape of free dental and optical service for the children of employees. Oculists and dentists visit the public schools in the mining towns and the schools adjacent to the steel works and examine the eyes and teeth of the children, beginning with those in the lowest grades. The teeth are cleaned and, when it is necessary, fillings are put in. The eyes are examined and the children's parents advised if further attention is needed. No charge is made for the dental and optical service. Glasses when prescribed by the oculist are not furnished free, but are purchased by the company at a wholesale price and supplied to the children at cost.

Fig. 5. Dental nurse instructing school children at a mining town in the use of the toothbrush

The beneficial effects of the dental and optical service to the children became apparent almost at once. Results in numerous cases have amply confirmed the modern belief that much ill health and even some apparent defective mentality in childhood is due to infected teeth or sub-normal eyesight. With continued attention given the children year after year, it is confidently expected that the good results will become even more noticeable.

In the autumn of 1915 the company and its employees mutually adopted the industrial representation plan for the government of their relations with each other. This

Fig. 7. Visiting nurse treating the family of an employee of the Colorado Fuel and Iron Company

industrial constitution, which has been notably successful in removing causes of friction and harmonizing the interests of employer and employee, provides among other things for joint committees on industrial relations. There are four of these committees in each of the mining districts and at the Minnequa Steel Works. Of these four, one is designated as the "joint committee on sanitation, health, and housing." Within the jurisdiction of this committee falls the general supervision of health and housing conditions. It cooperates with the medical department and the company management in initiating and carrying out whatever improvements seem desirable.

The services of the various committees on sanitation, health, and housing have been valuable beyond computation. Particularly in the mining camps these committees have made periodical inspections, minutely examining everything that has a bearing upon the health and comfort of the employees and their families. As a result of these inspections numerous recommendations have been made, practically all of which have been promptly acted upon by the management.

The Colorado Fuel and Iron Company believes that the health or illness of an employee generally begins at home. It has therefore given much thought to the providing of modern and sanitary dwellings for its workmen. Standards of housing have been constantly improved. In recent years, as the increased earning power of the work-

Fig. 6. Standard sanitary sink installed in washrooms used by the employees of the Colorado Fuel and Iron Company

men and their rising ideals of home life have created a demand for even better dwellings, many houses with modern conveniences have been erected at the various properties. The workmen and their families have in the main been found appreciative of the better living facilities provided.

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HIGH LIGHTS IN THE RECENT CONVENTION OF THE AMERICAN ASSOCIATION OF INDUSTRIAL PHYSICIANS AND SURGEONS

Inspirational Note Held Throughout—Industrial Medical Work Important Today in Stabilizing Labor Conditions—Appropriation from Congress Needed

Attending conventions is almost always inspirational. To break away from the daily routine, to make contact with active minds which are working out new problems, and to become acquainted with new points of view, helps one to review his own work with better perspective and to return to it with fresh vigor and enthusiasm.

This was particularly true of the annual meeting of the American Association of Industrial Physicians and Surgeons, held at Atlantic City on June 9, for Lieut.-Col. Harry E. Mock, president of the association, struck an inspirational keynote in his opening address which was re-echoed by other speakers throughout the day. His thought was that the wide application of the principles of industrial medicine and surgery, with the idea of service rather than gain, will be an important factor in solving the difficult problem of the conflict between capital and labor which is becoming more intense every day. He pointed out that the community of interest between the employer and employee can be expressed in no better way than in the solicitude of the employer for the physical well-being of his workers. He showed that largely through this channel broad-visioned employers were doing much to secure the good will of their working men and women and to eliminate friction. He emphasized the fact that to protect the life and health of the worker was not only profitable for the employer but an absolute moral obligation, which, if shirked, would tend to plunge the world still further into the night of class hatred and misunderstanding which seems to be impending.

THE CONFLICTING INTEREST OF CAPITAL AND LABOR IN HERNIAS

Later on in the discussion, the question of defining what constituted a traumatic hernia again brought out the importance of the labor problem which touches all branches of industry at the present time. Dr. A. W. Colcord, of the Carnegie Steel Company, read a resolution which defined traumatic hernia as hernia which occurs only when there is a definite laceration of the body-wall together with no evidence of a hernial sac. Dr. Colcord felt that employers were being greatly imposed upon by employees who wished to collect damages under the workmen's compensation act for injuries the original causes of which date back previous to the time of employment. The question of what constitutes a compensable hernia is, of course, one which has proved a particularly annoying stumbling-block in every state where workingmen's compensation laws have become effective. Dr. Colcord's first definition, however, which he later modified, was so drastically in favor of the employer that fear was aroused on the part of many attending the meeting that labor would feel that the American Association of Industrial Physicians and Surgeons was serving the interest of employers rather than that of the working people.

Dr. Otto Geier, of the Cincinnati Milling Machine Company, remarked that, since labor has become so favorably inclined toward the whole proposition of industrial medicine, it might not be wise to antagonize the workers and suggested that perhaps it would be better to ask the American College of Surgeons, which is not in immediate contact with the human side in industry, to define traumatic hernia for the benefit of workingmen's compensation boards.

Dr. Francis D. Patterson, of the Department of Labor and Industry of Pennsylvania, in characteristically vigorous and amusing phraseology roundly criticized "the constitutional effrontery which characterizes the legal profession on every occasion" in the attempt of lawyers to diagnose the conditions which lead to hernias, and suggested that the association should place itself on record as suggesting that a member of the medical profession be placed upon every industrial accident board in order that his advice might be available in questions requiring an expert medical opinion. "There isn't an employer throughout the land," he added. "who hasn't bought an old hernia and paid a darn good sum for it."

Dr. Colcord, in further defending his resolution, said that in paying compensation for a hernia not caused directly by the nature of the employee's work, the employer simply adds the cost of compensation to the price which the ultimate consumer must pay for the product. The man who suffers most, he said, is the employee who goes and lies about his condition. The employee ought to be protected against the premium now placed upon his dishonesty, by defining traumatic hernia so that a congenital or long-standing condition could not be used for securing compensation.

The resolution of Dr. Colcord, however, was referred to the banquet in the evening, but again referred by the banquet to the board of directors for further action.

During the business meeting in the morning it was decided to appoint a legislative committee, a publicity committee, and a committee to draft a curriculum for a uniform course in industrial medicine and surgery which may be given at medical colleges. There was some discussion over this latter suggestion inasmuch as some medical men connected with the faculties of medical colleges felt that medical schools on the whole would find it impossible to add to their curriculum. It was pointed out, however,

that the intention of the suggestion was simply to enable the association to answer a considerable number of queries from medical colleges which had asked the assistance of the officers of the association in preparing such curriculums. At the morning session the officers of the association were re-elected for the following year.

A GREAT PUBLIC SERVICE IN IMMINENT DANGER

The outstanding features of the afternoon session were a remarkable paper by Dr. John Moorehead, surgeon of the Interboro Rapid Transit Company of New York, and the appeal of Dr. C. D. Selby of Toledo, Ohio, for a continuation of the division of industrial medicine and hygiene of the working conditions service of the United States Department of Labor. Dr. A. J. Lanza, chief of that division, in his address, which preceded Dr. Selby's appeal, explained in considerable detail the investigations made by his division and how it was on a large scale helping industries in all parts of the country better to protect the health of the men and women in their employ. Dr. Selby made his audience feel that to abolish Dr. Lanza's division of the labor department, as threatened by the unwillingness of the present Congress to appropriate the necessary funds, would be nothing short of a national calamity.

Dr. Selby felt that the practice of industrial medicine was beginning to do much to stabilize labor conditions in the plants into which it has been introduced. "It seems more than a suggestion for stabilizing labor and if ever there was a time when this stability was needed in America it is today. If Congress in its wisdom," he said, "sees fit to cut off the appropriation for this department, it must be held responsible for the results which will follow. I know this wonderful service which Dr. Lanza's division is performing will practically terminate unless something is done to secure an appropriation, and it is our business to see that the United States Government perpetuates the conservation of industrial man-power through this division. We will go back from this convention to the manufacturers of the United States who can put this thing across. It is up to us to convince them of the necessity for immediate action in bringing pressure to bear upon their congressmen in order that the great work which has been started may not cease when it is most needed."

Dr. Selby was formerly associated with Colonel Lanza in the Federal Division of Industrial Medicine and Hygiene. He said that it was his firm belief that physical examinations were the foundation of bettering the health conditions of the workers in any industrial establishment. Without the data which examinations afford, Dr. Selby said it was difficult accurately to learn the source of the employee's ill health. He said that he was astounded to find physical examinations discontinued in some of the munitions factories of the government. He believed that the discontinuance was largely due to the fact that physicians had not utilized the information which they had obtained through the physical examinations. Members of the medical profession knew in theory, he said, how to apply this information, but were not acquainted sufficiently with the vocational needs of the various positions in the plant to use intelligently the information which they had acquired. Dr. B. J. Curry, of the American Thread Company of Holyoke, Mass., was the only one he had found who had worked out a practical basis for the application of knowledge obtained through the physical examination of employees. Dr. Curry had established physical standards required for each job in his plant and, through his card system, was enabled at once to determine whether or not a man was physically capable of performing the work of any specific position in the plant.

A RADICALLY PROGRESSIVE PAPER BY DR. MOOREHEAD

Dr. Moorehead's paper entitled "Is War-Time Surgery Applicable to Industrial Surgery?" was particularly stimulating. The discussion was of a technical nature and cannot be discussed here at length but it will fully repay anyone to obtain a copy of the proceedings of this meeting to read Dr. Moorehead's paper.

Criticism was made by some that Dr. Moorehead's suggestions were too radical and against all precedent. Dr. René Sand, the great Belgian surgeon, in commenting upon this criticism, said that the advance in surgery described by Dr. Moorehead had not been discovered during the war, but had simply been made more evident by the war; that the war had brought out great truths which the conservative and slowly moving body of the medical profession up to the time of the great necessity had failed to recognize.

* * * *

GOLF LINKS WHICH TOOK THE PLACE OF DRINK

Abingdon, Ill., Golf Course and Club-House Enthusiastically Supported—Small Fee Required of Players —Whole Families Learn to Play

This is the story of intelligent action on the part of a manufacturing concern which recognized a health menace to its employees in the use of alcohol. The town in which the factory was located "went dry." Neighboring towns did not. In order to keep its employees from the neighboring towns, this concern built a golf links and organized a golf club among its employees. The manner in which the plan worked is described in the following letter from J. E. Slater, President of the Abingdon Sanitary Manufacturing Company of Abingdon, Illinois.

The reason why I became so thoroughly interested in this golf course was that, for a time, the local option was bothering us considerably on the liquor question in this part of the country, and when Galesburg and Peoria were both wet, there was a tendency on the part of our men to flock to these centers. The thought occurred to me that if we could interest them in a pleasant occupation for their Saturdays, holidays, and Sundays, where we could keep our eye on them, it would be a paying investment. With that thought in view, we put our time, energy, and money into the development of the local golf club, and I am happy to say that about 60 to 70 per cent of the workmen in our factory enjoy and are members of our golf club.

Our dues are $6.00 a year, or 50 cents a month, as I find that when the men pay something for the privilege of playing, they do not feel that the golf course is a char-

Glimpse of golf links at Abingdon, Ill., where 70 per cent of the employees of the Abingdon Sanitary Manufacturing Company spend their holidays.

itable institution, and a deficit at the end of the year is made up very easily.

It is not unusual when our whistle blows to find a number of our men flocking to the golf course and playing for the different cups, which we present during the year for different contests, and when we go out later in the evening, we will find six or seven of their families enjoying a picnic lunch on the grounds.

This is also a very good thing for the factory, from the viewpoint of interesting customers. We had a number of customers who would not come to our plant or to Abingdon if it were not possible for us to get out and spend a Saturday or Sunday with them playing golf.

The golf course of the Abingdon Sanitary Manufacturing Company is one of the most interesting nine-hole courses that can be found in Illinois. A good, substantial club-house was built, with the result that the employees became so interested in the game that it was very extensively used.

One of the results has been that the employers have become acquainted not only with their workers but with the workers' families as well.

Now that prohibition will soon abolish the alcohol evil in the towns near Abingdon, the value of the golf links to the company still continues.

The idea is a novel one, but it has worked out with excellent results. Perhaps some other manufacturing concerns may find it useful.

* * * *

THE CONCRETE VALUE OF PHYSICAL EXAMINATIONS

Out of 599 Employees Examined Only Five Were Found To Be Normal—This Service Benefited 439 —As a Business Proposition It Pays

One of the principal reasons why more manufacturing concerns do not undertake to care for the health of their employees is the lack of definite statistical information which proves the value of this work. The following correspondence is of particular value because it gives definite information as to the need and value of physical examinations of employees. Information such as this is the most valuable kind of ammunition for the guns of industrial physicians and surgeons. It is the text of their gospel. The name of the concern is omitted by request. Their letter follows:

"Our physical examinations are conducted under the supervision of the Life Extension Institute. We started this service in May, 1915, leaving it optional with our employees whether or not they would take advantage of it. About 70 per cent of the employees made use of it. Later on we qualified this by making it compulsory for new employees, but voluntary for old employees. The same percentage still holds good.

"In 1916, 1917, and 1918 we repeated these examinations. The following figures taken from one of our final reports show the results of these examinations and what we learned on checking up to see if the employees were following out the suggestions.

"Out of 599 employees examined only five were found to be normal; 594 required advice regarding their living habits or physical condition; 377 of these were advised to go to a doctor for treatment, and of these 377, 317 were not aware of any impairment whatsoever. Very nearly every disease or disease tendency known was found.

"In following up the reports sent to our employees and checking them to see what had been done, we learned that of the employees who have carried out the suggestions or are carrying them out (this includes going to their doctors, dieting, changing their living habits and their conditions at home) there were 361; employees who are partially carrying out instructions, 66; employees who had made plans to do as advised (such as having their teeth attended to or vision corrected), 12; employees who had done nothing, 160. These results showed that during that period alone, 439 of our employees have or will have been benefited by this service.

"There were many cases of poor eyesight found, also teeth that required treatment. Several cases of unsuspected heart lesions and also a number of cases of incipient tuberculosis were discovered.

"There is no question whatever but that these examinations have resulted in a great deal of good for our employees. As a business proposition the service pays. The expense is considerable, and, while the returns do not appear in dollars and cents, they are there nevertheless.

"It is advisable before such a proposition is put up to the employees of a concern to educate them thoroughly into the principles of the idea and the ultimate aim; otherwise considerable opposition will be met.

"So far as decreasing the labor turnover is concerned, frankly, we do not believe it makes any difference, when a man or woman desires another job."

Statistical information from any concern which has had either success or disappointment in their health programs will be very greatly appreciated by the editor of this department.

* * * *

Employers of Labor Should Guard Against a Reported Increase of Tuberculosis

Dr. Frederick L. Hoffman of the Prudential Life Insurance Company of Newark, N. J., says that "for the first time in many years the tuberculosis death rate of American cities shows a distinct upward tendency in contrast to a persistent decline in the past."

The condition needs attention, although it is not alarming, he says. This emphasizes the need for the thorough physical examination of all industrial workers to protect to the fullest extent the labor forces of the nation at a time when labor should be functioning at its highest efficiency.

It is difficult for many employers of labor to realize that wisely directed care for the health of their employes is a gilt-edged investment. The present epidemic of influenza has forced many employers to care for the health of their workers in order that their plants might not be shut down entirely. The epidemic has given an extreme example of a condition which constantly exists to a lesser extent. Employers would do well to guard in every way against a possible marked increase of tuberculosis.

* * * *

PLANT DISPENSARY A PAYING PROPOSITION

Manufacturing Company Reports Benefit to Company and Men in Health Welfare Work

A recent letter sent to the A. B. Farquhar Company, Ltd., manufacturers of farm implements and heavy machinery, of York, Pa., brought the following answer regarding the benefit of their plant dispensary:

"Undoubtedly the hospital room has been a benefit to our men, and also a benefit to us, inasmuch as the men have had quick attention, often overcoming the necessity of going out and hunting a doctor; and, in a great many cases, they have been able to go back to work practically at once.

"Through the means of having a room to go to, the case is at once brought under observation, and if it is necessary for them to go home for further treatment, the case can be followed up without delay. Consequently, we believe that the men are brought back to the plant in better condition and possibly sooner than they would return otherwise, and, in addition, they are prevented from coming back before their physical condition permits.

"We therefore feel that what we are doing is a benefit, not only to our men, but to ourselves also."

The ignorant are never defeated in an argument.—Japanese proverb.

HOSPITAL, MEDICAL AND SPECIAL MEETINGS

SEVENTIETH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION

"Victory Meeting" at Atlantic City, June 9-13, Celebrates Advances in Medicine and Surgery Made During the War

The Seventieth Annual Session of the American Medical Association was held at Atlantic City, June 9-13, 1919, and was known as "The Victory Meeting."

When the president, Dr. Arthur Dean Bevan, called the opening general meeting of the American Medical Association to order on the steel pier at Atlantic City, on Tuesday evening, June 10, the music hall was filled to overflowing—main floor and gallery alike—and the platform was occupied by a large group of foreign guests, many of them in uniform. An interesting feature of this meeting which preceded the address of the president-elect, Dr. Alexander Lambert, was the introduction by Surgeon-General Ireland of the foreign guests. As the representatives of each nation arose a band played the appropriate national air. In his address Dr. Lambert dwelt upon the success of preventive medicine in the war as contrasted with the destructive effect of disease in former wars, the lessons to be learned in determining future action, the educational needs of the medical profession as emphasized by the war, the relation of the Red Cross to the army, and the necessity for a nation-wide controlling organization to wipe out preventable disease, i. e., a national department of health.

Among the matters of interest to hospitals discussed before the convention was the suggestion of the speaker of the house of delegates, Dr. Hubert S. Work, that the association create a council on hospitals:

"Such a bureau should comprehend hospital architecture, construction, plumbing, organization, contagious diseases, general medicine, surgery, interns, practical nursing, trained nursing—in short, a bureau of information for the standardization of all detail relating to the hospital care of the sick. Standards fixed by a permanent council of experts, directed by this association, would compel hospital directors to comply with their requirements in order to secure a coveted rating. It would avoid the expensive canvass and tedious propaganda now being conducted jointly by the American Medical Association and the American College of Surgeons. The weight of the association's influence behind this movement directed in the field by selected full-time men, would give the public assurance and point of appeal on hospital questions.

"Duties of this bureau would be: consultations with municipalities proposing to build; with industrial companies planning sick care for their employees, and with state governments. Proprietary and sectarian hospitals contemplating enlargements or troubled by incompetent management would welcome the efficiency expert of such a bureau, while philanthropists could know that their bequests were worthily bestowed and would be honestly conserved, as by a trust."

The council on medical education reported the work of the third survey of hospitals. Of the 6,440 hospitals in the United States which in October, 1918, had two or more beds, or a total capacity of 758,442 beds, only 1,126 hospitals, or 17.4 percent, have or desire to have interns. These 1,126 hospitals, however, include the larger institutions and have 35.6 percent of the total bed capacity. A special questionnaire was sent to these hospitals, and elicited detailed information from 801.

As regards laboratory facilities, 97 percent are equipped to make urinalyses, 94.6 percent for blood examination, 88 percent for making skiagraphs, 89 percent for gastric analyses, 88 percent for bacteriologic examinations, 77.5 percent for tissue examinations, 59.5 percent for nitrogen determinations, and 20.8 percent for electrocardiographic examinations. About 79 percent have expert laboratories in charge of their clinical pathologic laboratories; 76 percent have expert roentgenologists; 72.8 percent have expert anesthetists and 67.5 have trained dietitians.

As for case records, it appears that 88 percent of these 801 hospitals keep a record of physical examination at admission; 90.5 percent, a daily record; 88.3 percent, a description of operations; 92 percent, condition at time of discharge; 72.8 percent, necropsy findings; 69.1 percent, final results. In 72.6 percent, histories are signed by the staff physician; in 57.8 per cent, a separate index by name and diagnosis is kept.

Only 46.3 percent of these hospitals have medical libraries, 61.9 percent have medical journals available.

A tentative schedule of essentials in a hospital for the satisfactory training of interns comprises requirements in regard to (1) the staff, (2) hospital equipment, (3) histories and records, (4) the work of the intern, and (5) miscellaneous.

1. An organized staff, composed of men of unquestionable integrity, proficient in their respective fields, is a requisite. Staff members should give personal attention to the patients under their charge; each staff member should visit the hospital every week, and some member of each department every day. The training of the interns should be directed and supervised by staff members. Clinical conferences, clinical and pathologic conferences, and hospital medical societies, for staff members and interns, are also to be desired.

2. The equipment should include pathologic, clinical and roentgenologic laboratories, each in charge of an expert; also a working medical library, and adequate provision for the housing and recreation of interns.

3. Complete histories, signed by the person writing them, should be taken, and should cover complaint, physical examination at admission, laboratory findings, description of operation if any, daily record, condition on discharge, date of discharge, end results, and necessary findings in case of death if necropsy is performed. The records should be kept by a trained historian and should include an alphabetical index of patients, another arranged by diagnosis, and for surgical cases, another arranged by regions involved.

4. A set of printed rules governing the rights, duties and privileges of interns, should be furnished each intern or posted in a conspicuous place. The work of the interns should be under the supervision of staff physicians and should include the writing of histories, clinical laboratory work, roentgenologic work, administration of anesthetics, dietetics, obstetrics, necropsies, observation, care, and treatment of patients, application of surgical dressings and performance under supervision of minor and more common major surgical operations. The care of patients and routine work should not demand more than eight or at most ten hours of each intern. Intern service should extend through at least twelve months and may advan-

tageously be extended through eighteen months or two years.

5. No preference is expressed as to rotating or non-rotating services for interns. Where the internship is taken as a prerequisite to graduation, the evaluation of the hospital work should be done by the medical school. A hospital should have at least seventy-five beds and three interns to provide for a rotating service in laboratory, medicine, and surgery. In hospitals having four or more interns, they should preferably begin their work at different times and pass through junior and senior service. In hospitals having one hundred beds or more there should be an addition to the interns, a full-time resident physician who has had at least one year's experience as an intern, and whose duty it should be to supervise the work of the interns.

One of the papers in the orthopedic section which was of vital interest to hospital workers because of its bearing on the efficiency of nurses employed in hospitals, was Dr. William C. Peters' paper on "The Foot Problem in the Army." After classifying the men who came up for examination into three classes: (1) men with good feet; (2) men with potentially weak feet for whom an alteration of the shoe was usually adequate treatment; and (3) men with bad feet who were given limited service. Dr. Peters drew certain lessons for civil life and practice. He said, in the first place, that nearly all foot trouble is caused by bad shoes. In the second place, he thought that the army-shoe last would cure most defects. In the third place, he urged that more attention should be given to fitting shoes, and, finally, that foot exercises under careful supervision give good results. In the discussion on the paper it was urged that a nation-wide campaign be conducted on the construction and fitting of good shoes.

Two general meetings of peculiar interest were the victory meetings, one of which was held in the music hall on the steel pier on Wednesday evening, the other in Keith's theater on the garden pier on Thursday evening. At the former, national organizations with definite medical interests, such as the Red Cross and the National Tuberculosis Association, were represented by speakers of their choice. At Thursday's evening victory meeting, representatives of different nations were asked to relate what their nation had done medically under war conditions. This meeting was followed by a theater party and, in an adjoining hall, a reception to the president and foreign guests.

The scientific exhibit was divided into three sections: the main exhibit; the special exhibit of the medical department of the army, the bureau of medicine and surgery of the navy and the U. S. Public Health Service; and the moving picture exhibit. The pictures shown included, "The Navy Put Them Over," showing the part played by our navy in transporting and guarding our troops; "Fit to Win," an educational film on sex hygiene; "A Naval Hospital," showing the character and work of a naval hospital; "The Field Hospital Unit," showing the work of the field hospital; "The Ambulance Company," showing the organizations and work of the ambulance company; and "Open Your Eyes," a film on the social evil and veneral diseases.

Dr. Alexander Lambert, New York, took office as president for this year, and Rear Admiral William C. Braisted, surgeon-general of the United States Navy, was chosen president, to take office in 1920, and the following men were re-elected to office: William N. Wishard, Indianapolis, first vice-president; E. Starr Judd, Rochester, Minn., second vice-president; C. W. Richardson, Washington, D. C., third vice-president; John M. Baldy, Philadelphia, speaker, house of delegates; Dwight H. Murray, Syracuse, N. Y., vice-speaker, house of delegates; Alexander R. Craig, Chicago, secretary; William Allen Pusey, Chicago, treasurer; George H. Simmons, Chicago, editor and general manager.

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MINNESOTA HOSPITAL ASSOCIATION

Second Annual Meeting Full of Interest—Membership Doubled Since Last Year

The Minnesota Hospital Association held its second annual conference in Minneapolis June 4 and 5. The growth of this organization has been very gratifying and surpassed all expectations, for the registration showed a membership of 104, double that of last year.

President's Address

Standardization, said the president, Dr. E. S. Mariette, superintendent of Glen Lake Sanatorium, Hopkins, has been the war slogan. If standardization was valuable during the war, why is it not valuable now? Why have any but standardized hospitals?

No one group concerned in hospital work, Dr. Mariette said, can determine standards for all groups. The only true standardization can be arrived at by the cooperation of all. Dr. Mariette opposed the claim of nurses to determine the standards of their own instruction.

Educational Work at Fort Snelling

Capt. W. S. Miller, chief of the educational service, U. S. A. General Hospital No. 29, Fort Snelling, described the educational work there and its relation to the other services. Fort Snelling is one of the four orthopedic hospitals in the country. The big thing there is the surgical and orthopedic service. The chief purpose is to get the men cured and back into civil life again. Nothing is done by the educational department unless prescribed by the ward surgeon. There is the best of cooperation between the educational and the medical men. The educational work is divided into five branches: (1) the psychological and statistical; (2) the general division; (3) the technical division; (4) the recreational division, and (5) the occupational therapy division. There is a representative of the psychological and statistical division who interviews the patient in each ward within forty-eight hours of his arrival and takes his educational and occupational history and his occupational preferences and gives him a psychological examination and assigns him to class work. The general division is concerned with instruction in academic subjects. Foreigners and men who wish to supply deficiencies in early education can here receive the instruction they desire. The technical division gives instruction in occupational subjects, including agriculture and shop work and commercial subjects. The fourth, the recreational division, by agreement between the Surgeon-General and the Red Cross, is in charge of the Red Cross. Its activities cease between the hours of 9 and 4, while instruction is going on, at least so far as concerns amusements in which the men are passively entertained. Recreations in which the men themselves are acting, such as tennis, ball, or billiards, do not fall under this prohibition.

Men, who because of their disability are unable to attend class out of the ward are given instruction in handicrafts or academic subjects by the reconstruction aids in occupational therapy, women especially trained for this particular work.

Work is not compulsory except in certain special curative cases. As the average length of stay in the hospital is only twenty-one days, it is impossible, in the majority

of cases, to accomplish much in the way of perfecting a vocation. The work does, however, provide the stimulus for the activity prescribed by the surgeon. The surgeon may say that he wishes the patient to exercise his hand or his arm or some other portion of the body, in a certain way. It is the task of the educational service to provide an occupation in which the prescribed activity may be embodied, so that the patient will have an interest to fix his attention on the performance of his task.

During the patient's brief stay in the hospital, every effort is made to interest him in some trade or profession, so that when discharged, if disabled, he will avail himself of the training afforded him by the Federal Board for Vocational Education. Every disabled man is interviewed by a representative of this board before he is discharged from the hospital.

The Rehabilitation Work of the United States Army

Mr. H. W. Jones, district vocational officer of the Federal Board of Vocational Rehabilitation for Minnesota, North and South Dakota, and Montana, described the work done by his division. It is the task of this body to follow up the discharged, disabled men and see that they receive the training and encouragement needed to make them self-supporting. Every man who is disabled 10 per cent or more is entitled to compensation and training. The Federal Board of Vocational Rehabilitation adds enough to the compensation to which each man is entitled to make $75 a month while he is in training.

The board is not running a school; it effort is to find suitable opportunities for instruction in each case. The work is tremendously varied and there are no two cases alike. As an illustration, Mr. Jones cited the case of a Finnish boy who had been a presser, earning $20 a month in his father's tailor shop. He wanted to be a tailor's cutter but he understood very little English. A chief cutter who understood Finnish was found, and after five months' instruction under him, the boy was offered $200 a month as a cutter.

A boy who had lost a leg was trained in acetylene welding and after six weeks' instruction was able to take a position paying 68 cents an hour.

An automobile mechanic who was also a musician became totally deaf and therefore unable to practice either of the former callings. He was instructed in lip-reading and given an opportunity to develop a taste for drawing on which he had hitherto placed no value. After three months' time he was paid $15 for one drawing.

The service keeps track of all the men because each one has to report every month in order to receive his compensation.

Industrial Work in Tuberculosis Sanatoriums and Its Relation to the Convalescent in the General Hospital

Miss Beatrice Lindberg, industrial worker for the Advisory Commission of the State Sanatorium for Consumptives, defined industrial work as anything to take the patient's mind off from the personal equation.

Miss Lindberg told of a woman who was listless and idle and who could not be induced to take an interest in sewing or embroidery or crocheting because "I'm so veak up here" (indicating her arms and chest).

Her interest was aroused at the sight of a basket. "You make?" she asked Miss Lindberg. "Can I make?"

"But," Miss Lindberg said, "you're so veak up here."

"Oh," she replied, "I'm not so veak as I say." And later she proudly displayed what she had made, saying with satisfaction:

"I'm much better. See, I can vork."

Patients are allowed to have the objects they have made on paying the price of the materials, if they can do so. If this is a hardship, it is not insisted on. Articles left on hand are placed on sale at market price. Patients may sell their own articles but only at the prices fixed by the sanatorium. The tendency to overwork for the sake of gain, however, must be guarded against.

The work has produced a new attitude of the patient toward the sanatorium. One woman said, "I am going to tell all my friends that the sanatorium is a nice place to come to, because you can learn things you couldn't get a chance to learn anywhere else."

Duties of a Director to the Hospital

Mrs. W. D. Gregory, president of the Northwestern Hospital, Minneapolis, the directing board of which is composed entirely of women, said that the first duty of a director is to attend board meetings regularly. At these meetings the policy of the hospital is determined and ways and means of carrying on work decided on. The loyalty of everyone connected with the hospital is a most important factor, and this should begin with the board.

A Properly Organized Clinical Laboratory for the Private Hospital

Dr. C. R. Drake, pathologist of the Swedish Hospital, Minneapolis, said that the laboratory in the hospital should rank with any of the departments in importance. A central location, near the operating-room group and adjacent to the x-ray laboratory, is most desirable, because it permits easy transmission of material and the presence of the laboratory man in the operating room when desired. An adequate but not extravagant allowance of space and ample and up-to-date equipment are also important. The records should be concise and kept so as to be accessible. A permanent file should be kept with interesting specimens. The laboratory should be in charge of a medical director with sufficient clinical knowledge to interpret the laboratory findings for the clinical men.

The Roentgenological Laboratory in the Private Hospital

Dr. F. S. Bissell, of the University Hospital, Minneapolis, believes that there is something radically wrong with the roentgenological laboratory in the private hospital. New ideas in roentgenology are to be found, not in the hospital but in private x-ray establishments. The reasons are, in part, the following: Roentgenology is a mushroom growth of the last twenty years. No one has known just what the field of roentgenology properly was. It has even been denied that the roentgenologist had any field as a medical specialist. Few men put their best efforts into roentgenological departments in private hospitals because these departments have been too highly commercialized. The roentgenologist is expected to split his fee with the hospital, and, if the hospital employs a technician, it takes the whole fee. A roentgenologist working in his own private laboratory can use and break all the equipment he needs to produce the results he desires, but he is called to account in the hospital for any increase in the consumption of supplies, and, therefore, he can not do his best work in the hospital.

There is a sharp line of demarcation between the roentgenologist and the technician. The roentgenologist receives cases as a consultant in medicine, and, in making his report, takes into account the findings which the clinician furnishes him. The technician merely receives the patient for a picture or treatment under instructions under or from the physician, and these instructions are sometimes ridiculous. A technician, for instance, received a

patient with the instructions from his physician to "give five-minutes' treatment twice a week." A five-minutes' treatment might be fatal, or it might be so light as to be entirely without effect. The roentgenologist should determine and supervise the treatment, and, in making his report, he should give the facts which he finds, his deductions from those facts, and his diagnosis.

Dr. Kano Akeda, roentgenologist and pathologist to St. Barnabas Hospital, Minneapolis, declared that Dr. Bissell did not do justice to the roentgenologist in the private hospital. It is true that the small hopsital cannot afford to keep a full-time roentgenologist, but the position of roentgenologist and pathologist may very well be combined and give employment to a full-time man.

Hospital Medical Records

Dr. H. B. Sweetser, of the staff of St. Mary's Hospital, Minneapolis, emphasized the importance to the patient, to the physician, and to the hospital, of properly kept medical records. He declared that a standardized hospital had a claim on the community and should be subsidized.

Relations Between the Staff and the Hospital

Dr. R. E. Farr emphasized the necessity for a staff on every institution that calls itself hospital. No one goes to see work done at a non-staff hospital. The staff should be chosen principally by doctors. A physician is not competent to select the best nurse, nor is anyone but a physician competent to select the best staff physician.

The Hospital a Community Institution

Mr. G. W. Olson, superintendent of the Swedish Hospital, Minneapolis, said that the hospital, like the public school, was a community institution. While he would not go so far as to say that attendance at the former institution should be made universal and compulsory, he did believe that there were a number of other points of resemblance. Just as the pupil in the school receives the benefit of the entire curriculum offered, so the patient should receive the benefit of all that the hospital has to offer. He should not be sent out, cured of the complaint for which he entered, but suffering from others, unsuspected, but perhaps equally dangerous. He should be thoroughly examined and put into a condition as nearly normal as possible. Mr. Olson did not agree with Dr. Farr that the staff should be selected entirely by physicians. He believed that it should be selected by the board of trustees, with the advice of the best physicians available for the purpose.

Hospital Standardization

Mr. John G. Bowman, director of the American College of Surgeons, emphasized the necessity of getting the staff to formulate rules for its own guidance and then making everyone who practices in the hospital, including the biggest men in the community, submit to these rules.

Organization of the staff does not necessarily mean a closed staff. The staff may include all of the physicians practicing in the community. Staff meetings should be held regularly, to analyze results and to call attention to good work as well as to ask for an explanation of poor.

In the evening a round-table conference, conducted by Mr. J. E. Haugen, manager of St. Paul Hospital, took up a number of practical questions.

Safeguarding the Hospital Against Non-Payment of Patients' Bills

Mr. G. W. Olson, of the Swedish Hospital, Minneapolis, said that if the bill presented in the last session of the legislature had passed, it would have made the patient liable for unpaid bills to a hospital just as he now is for bills owed to a hotel. In response to a question, Mr. Olson said that he takes a note from a patient who shows a disposition to dispute an account. If the patient is simply hard up, he prefers not to take a note. A note is not so good to bring before the court for collection as an itemized account.

Dr. A. B. Ancker, superintendent of the City and County Hospital, St. Paul, said that his institution had an easy way of solving the problem; they transferred a patient who was slow pay to the free service. This was usually so unwelcome to the patient that he would pay to avoid it.

In response to a question, the Rev. Henry Hartig, superintendent of St. Andrew's Hospital, Minneapolis, said that the average annual loss of his institution for the last four years through bad accounts was 5 per cent. Mr. Olson gave his as 2.5 per cent.

Dining-Room Service

The question here was in regard to the proper seating of the various branches of the service. Dr. Ancker said that the City and County Hospital had one dining-room for 150 nurses; another for the interns, the chief engineer, and stewart, presided over by the matron; a third for the assistant superintendent and his wife, the resident physicians, and the resident surgeons; and a fourth and fifth for the male help and the female help, respectively. He believed that round tables were the best, seating from eight to ten at a table.

Miss Anna Keller, of the City Hospital, Red Wing, stated that the cafeteria system had worked out very well for the Sunday evening supper. It allowed one-half the help to take a half-day off.

Meeting the Need for Nurses and Student Nurses

Dr. A. B. Ancker, of the City and County Hospital, St. Paul, said that the remedy for the shortage of nurses is to shorten the term of training. At his hospital the quota is filled, but not with graduate nurses. He believes that the nurse should get sufficient training in two years. A public-health nurse should have three or four years' training.

Miss Lydia H. Keller, secretary of the Minnesota State Board Examiners of Nurses, gave the reasons for insufficient supply of nurses as long hours on duty, bad housing conditions, and inadequate allowance of pay. Many students are put on special duty for twenty-four hours at a time and deprived of opportunity for lectures and time for study. The hospitals which are shortest of student-nurses and executive help are those which make the most unreasonable demands of their nurses; thus cause and effect work in a vicious circle; the hospitals are obliged to overwork their nurses because they cannot get enough, and they cannot get enough because they overwork their nurses.

Social Service Work in the General Hospital

Miss Marian Tibbetts, of the social service department of the University Hospital, Minneapolis, briefly sketched the history of hospital social service, and described the character of the work done at the University Hospital. Much is done in the obstetrical and gynecological departments, especially with unmarried pregnant women. Heart cases, cases of malnutrition, and gonorrheal infections, including gonorrheal vaginitis in children, are also important divisions. The primary function is education, and other existing agencies are utilized wherever possible.

The Dental Resident in the Hospital

Dr. W. A. Grey, dental resident of the University Hospital, Minneapolis, read an interesting paper on this subject, illustrated with lantern slids, which it is not neces-

sary to abstract here as he has promised to write a somewhat extended paper on the subject for THE MODERN HOSPITAL.

Engineering Problems of the Hospital

Dean John R. Allen, of the College of Engineering of the University of Minnesota, emphasized the importance of the problems of air-circulation, dust, and the heat generated by people in the room. He believes it impossible to ventilate a hospital today without the use of a mechanical system and humidifiers; where humidifiers are used, opening windows makes conditions very much worse. Minnesota, Dean Allen says, has a law which requires institutions to maintain ventilating plants but does not require that they be operated. Because it takes money to run them, many of these expensive plants stand idle. Dean Allen believes it wasteful to put a $100,000 plant in charge of a cheap man, incapable of operating it.

Hospital Standardization and the American College of Surgeons

The interest excited by the talk of Mr. Bowman, director of the American College of Surgeons, prompted the arrangement of an opportunity for members to ask him questions in regard to the hospital standardization program of the college. At least one point of misunderstanding was cleared up. It had been inferred by some hospital people that in order to comply with the standards in regard to case records, the hospital must in every case take its own histories. Mr. Bowman explained that it was perfectly satisfactory if the physician who sent the patient to the hospital would send in, also, a duplicate copy of the history he had taken.

Nursing Education

In introducing the speaker on this subject, the chairman referred to the recent movement for an eight-hour day and fifty-six-hour week for nurses (defeated in the last Minnesota legislature), and said that he hoped it would be possible to get together and come to an understanding on the subject.

Miss Carrie E. Eppley, superintendent of nurses at Minneapolis City Hospital, briefly reviewed the history of nursing. She quoted from an eighteenth century writer:

"I inquired from Dr. ———— about the characters of the nurses, and he says they always engage them without any character, as no respectable person would undertake so disagreeable an office. He says the duties they have to perform are most unpleasant, and it is little wonder that many of them drink. . . . I know that a respectable woman was declined the other day, as being too good for the situation. The only conditions that are made are—that they are not confirmed drunkards."

The day has gone by, said Miss Eppley, when it is possible to have an efficient nurse who has not first had a good education as a foundation. Aren't we all anxious to have the pupils receive a high nursing education and *our* school to be considered at least *one* of the very best, and yet do we not often allow our hospital problems to interfere with the education of our pupils? How many of us plan curriculums which require that our pupils are to have so many classes of a certain number of hours in a certain subject and then fail to relieve them from duties in the hospital for their classes? Then, too, how many of us fail to give the pupils sufficient time to make the preparation for their class work? Then, too, we have the night nurse who usually has twelve hours on duty. She must get up several times a week for classes. Are we considerate in planning our class hours so that the night nurse does not have to be disturbed until late in the day for her classes?

Another great problem that comes to us in educating the nurse is—just how much of the domestic work should she be expected to do, that is, mopping, cleaning, and dishwashing? Of course, she must have sufficient knowledge of what this work is and how it is to be done in order to direct those whose duty it may be to do this work; but today when our domestic help fails us and the dishes are dirty and no maid can be secured, are we as women as well as nurses to refuse to do the work of a domestic? Can someone solve this difficult problem and relieve the already over-taxed and tired nurse from both the labor and the mental strain, (for she does resent this kind of work, even in her days of probation)?

In discussing this paper Miss Margaret Crowl, president of the State Board of Examiners of Nurses, said that in the wards, patients were the first consideration; while the nurses are not forgotten when there is need for extra service, too often they are overlooked when it comes to providing them with proper food, air, and opportunities for exercise and rest.

Miss Marian L. Vannier, acting superintendent of nurses at University Hospital, Minneapolis, said that she had never worked under any other than the eight-hour system. She has, herself, put it into effect without requiring more nurses than under the ten-hour system.

In California the law does not permit nurses to work more than eight hours daily or more than forty-eight hours a week. Under this system, most hospitals have a seven-hour week-day schedule and six on Sundays, while others have eight hours daily, and one full day off once a week. The labor forces offered the hospitals a fifty-six-hour week and the hospital refused; thereupon a forty-eight-hour week was put through.

Dr. A. B. Ancker, superintendent of the City and County Hospital, St. Paul, failed to see why it was necessary to get together on a situation which was satisfactory to practically everyone. He had never seen a broken-down, sickly, student nurse or one adversely affected by training; "there ain't no sich animal."

He believes in the eight-hour system and is arranging to put it into several departments of the hospital, but not for nurses.

Miss Lydia H. Keller, secretary of the State Board of Examiners of Nurses, said that nurses do not wish to have their hours regulated by legislation if it can be prevented. The failure of hospitals to limit the working hours of their student nurses necessitates legislative action.

Mr. G. W. Olson, superintendent of the Swedish Hospital, Minneapolis, said that the measure advanced in the last Minnesota legislature is too far advanced for the state but not for the nation. It is an inevitable thing and correct in principle.

Dr. H. O. Collins, formerly superintendent of Minneapolis City Hospital, now of Winnipeg General Hospital, spoke of the lack of appreciation on the part of the public and the hospitals of what the pupil nurse is entitled to receive in the way of training. The hospital contracts to give the pupil nurse training in return for her services. It is no more entitled to deprive her of hours for lectures and study because of any increased need for her services than it would be to deprive any of its employees of their pay because it would be convenient to use the money in some other way.

The Eight-Hour Law for Women Employees in Hospitals

Miss Eliza Evans, secretary of the minimum wage committee, said that if nurses and the hospitals do not take

action to limit hours of labor, the public will. Eight hours as the labor standard is not only nation-wide but world-wide. It has been proved that the output is greatest and the laborer most efficient under an eight-hour system.

The chief objection on the part of any employer is the increased cost on beginning to put the eight-hour system in operation. The public has no right to medical service at the expense of the workers. It is a matter of interest that whereas for the protection of the race it is particularly desirable that the working hours of women be safeguarded, a thousand men have the eight-hour day for every woman who has it.

French Hospitals and Nurses

Dr. A. T. Laird, superintendent of Nopeming Sanatorium, Nopeming, gave some of his experiences in anti-tuberculosis work in France. He described the great system of state-maintained hospitals under the public charities, the *Assistance Publique*, and the tuberculosis dispensary at the Hôpital Léon Bourgeois.

Election of Officers

The following officers were elected: Col. L. B. Baldwin, superintendent of the University Hospital, president; Dr. P. M. Hall, superintendent of the Walker Sanatorium, first vice-president; Mrs. S. H. Knight, superintendent of Asbury Hospital, Minneapolis, second vice-president; Miss Naomi Johnson, superintendent of the City Hospital at Red Wing, third vice-president; J. E. Haugen, superintendent of St. Paul Hospital, secretary and treasurer; Dr. A. B. Ancker, superintendent of the St. Paul City and County Hospital, Miss Bertha Matlick, R.N., superintendent of Hill Crest Hospital, Minneapolis, and Dr. A. T. Laird, superintendent of Nopeming Sanatorium, Nopeming, members of the executive committee.

Governor Burnquist, Dr. E. P. Lyon, dean of the medical college at the University of Minnesota, and the members of the state board of control, were elected honorary members of the association.

The next annual meeting of the association will be held in Duluth, June, 1920.

The association adopted a resolution, offered by G. W. Olson, declaring in favor of "the standardization of medical and surgical practice in the hospitals of Minnesota."

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CATHOLIC HOSPITAL ASSOCIATION OF THE UNITED STATES AND CANADA

Meeting Held in June in Chicago—Officers Elected—A More Extended Notice To Follow

The fourth annual convention of the Catholic Hospital Association of the United States and Canada was held June 25, 26, and 27 in the hall of St. Xavier's Academy, Chicago. Most Reverend Sebastian G. Messmer, Archbishop of Milwaukee, Reverend Charles B. Moulinier, Regent of the Marquette School of Medicine, Milwaukee, and Dr. Bernard Francis McGrath, of Milwaukee, were re-elected honorary president, president, and secretary, respectively. Rev. M. P. Bourke, Ann Arbor, Mich., was elected vice-president. Vice-presidents are to be named from each order represented in the membership of the association.

The board of directors is as follows: Dr. Joseph Byrne, New York; Dr. L. D. Moorehead, Chicago; Mr. Michael Zimmer, Cook County Hospital, Chicago; Sister Veronica, Mercy Hospital, Chicago; Sister Mary Picher, Montreal General Hospital, Montreal; Sister Bernadine, St. Joseph's Hospital, St. Paul, Minn. There is in addition an advisory committee consisting of bishops and archbishops.

The proceedings of the meeting will be reported in the next issue of THE MODERN HOSPITAL.

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THE STANDARDIZATION OF TUBERCULOSIS SANATORIUMS

Committees From the American Sanatorium Association, the National Tuberculosis Association, and the Mississippi Valley Conference on Tuberculosis Recommend Standards for the Grading of Sanatoriums

On June 14, committees from the American Sanatorium Association, the National Tuberculosis Association, and the Mississippi Valley Conference on Tuberculosis met to consider the question of standardization of tuberculosis sanatoriums.

A plan of standardization has been drawn up which will be revised at the next annual meeting and turned over to the National Tuberculosis Association with recommendations that it supervise future gradings of tuberculosis sanatoriums as outlined in the recommendations.

The plan, as it stands now, is to grade the sanatoriums on plant and equipment, on administration, and on medical service. Under each of these factors is a schedule including all the items which the rating commission feel are valuable in the standardization of institutions. All values, both as to quantity and quality, assigned to any item under any factor, shall be precisely stated, and the establishment of claims shall be based simply on questions of fact. Items which do not lend themselves to this

Delegates of the Catholic Hospital Association assembled on the beautiful lawn of St. Xavier Academy, Chicago, where

restriction shall not be included in the schedule. These items shall be divided into the following three classes: items essential for standardization; additional items which add to the sanatorium's usefulness; such items of superiority as deserve special recognition.

Sanatoriums showing merely such qualifications as come under the first heading shall be rated "C"; those coming within the second, "B"; and those coming within the third, "A." Each rating shall have a definite numerical value so that an average may be struck between the ratings of the three factors of any one institution and the final letter assigned.

The first provisional standardization shall be made from unchecked reports returned by the sanatoriums themselves on suitable forms, and later standardizations, to be published in the *Journal of the Outdoor Life*, will be based on these returns, checked as may be necessary to substantiate claims.

The committee of the American Sanatorium Association recommends central state supervision over the construction and equipment of sanatoriums and that the immediate board of trustees consist of five members, especially qualified to serve, appointed by the county board but not to include in its personnel members of the county board; at least one member of the board of trustees should be a licensed physician.

In its recommendations on location and site the committee lays special stress on transportation facilities. It takes into account also city sewerage, gas, electricity, the presence of objectionable features, such as cemeteries, certain industrial occupations, etc. It recommends strongly the purchase of enough property to provide recreation space for patients and, if possible, a farm colony for ex-patients, although it opposes the purchase of farm property with a view to using it to produce an income for the institution on patient labor, with the exception that small truck-gardening and poultry establishments are permissible in connection with the industrial occupation department.

Under general construction, it advises that 20 per cent of the total capacity of the institution should be arranged for the care of acutely ill patients, and 30 per cent should be planned for patients not acutely ill but not ambulatory. Special accommodations should be made for children classified as open cases, and separate quarters for children not acutely ill. The infirmary patients should be housed in two-story fireproof buildings, and the ambulatory patients in units of sixteen in one-story buildings or of thirty-two in two-story buildings; in the two-story buildings the central portion must be fireproof. Canvas construction is advised against.

Under special construction, the committee recommends special planning for the housing of staff and employees, in special buildings when possible; rooms for the physical examination of patients, nose and throat and other treatments, laboratory use, and for the x-ray plant (every building with a hundred beds or more should have a complete x-ray equipment); a recreation room for patients where every effort should be made to do away with the institutional atmosphere, and quarters for industrial occupations (this may be included in the recreation room in small institutions); staff dining-rooms in larger institutions, and, in all institutions a separate dining room for servants; and a room for the care of the dead which can be easily and inconspicuously reached.

On the medical and nursing side the recommendations of the committee are equally explicit. The medical head of each sanatorium should be an expert in his field and he should devote his entire time to the affairs of the institution, except in cases of small sanatoriums, where the Minnesota system may be adopted; that is, the full time of one physician may be divided between two closely located sanatoriums. A resident physician should be provided for each fifty patients.

A nurse should be maintained for each ten patients, and non-graduate nurses may be employed under the strict supervision of a graduate nurse who should be in charge of the nursing department.

All large tuberculosis sanatoriums should maintain a training school for nurses, if possible in cooperation with nearby general hospitals.

The question of the necessity of employing a dietitian has been left open. The services of a steward are essential, however, in institutions of seventy-five patients or more. He should have charge of the culinary department, all its employees, and the purchase and storage of food supplies, under the supervision of the superintendent. In all institutions of seventy-five or more, a housekeeper should be employed, but in smaller sanatoriums her duties may be performed by the head nurse.

The committee is emphatic in urging the establishment of a farm colony for ex-patients. "The committee holds the view that one of the weakest links in the present campaign against tuberculosis is the ...lack of management of ex-patients...The waste of public funds may be....reduced by the avoidance of relapse in ex-patients, should they be given proper employment under strict and efficient supervision."

At the same time, however, the committee opposes strongly the use of patient labor as an economical consideration in the management of the sanatorium, although therapeutic occupations are encouraged.

the fourth annual convention was held June 25, 26 and 27. Many orders from the United States and Canada were represented.

Finally, as a very important health measure, the committee urges the establishment of free tuberculosis clinics and the maintenance of a full-time visiting nurse service, by means of which cases of tuberculosis may be discovered and admitted to the institutions, and discharged patients may be kept under proper supervision.

The committees acting for the three associations included the following men: Dr. Lawrason Brown, Saranac Lake, N. Y.; Dr. Harry Lee Barnes, Wallum Lake, R. I.; Dr. E. G. McSweeney, Brockton, Mass.; Lieut.-Col. Foster; Lieut.-Col. Nichols; Dr. Robinson Bosworth, St. Paul, Minn.; Dr. George T. Palmer, Springfield, Ill.; Dr. E. VanderSlice, Ann Arbor, Mich.; Dr. Esteo Nichols; and Dr. Bayard Crane, Rutland, Mass.

* * * *

NATIONAL TUBERCULOSIS ASSOCIATION

Closer Cooperation Necessary from Governmental Authorities—Tuberculosis Nurses Needed—Health Insurance Necessary to Check Disease Among the Poor

The fifteenth annual meeting of the National Tuberculosis Association was held at Atlantic City, June 14-17.

The address of the president, Dr. David R. Lyman, was devoted to the relationship of the state and national association to the other agencies in the tuberculosis campaign. Dr. Lyman stated that while the war had clearly shown the triumph of modern medicine in the control of acute infectious diseases, it had also shown with equal clearness the great inroads that chronic diseases were making in our national economy. In the attack on tuberculosis, Dr. Lyman regarded as of first importance the cooperation of the national organization with the established health authorities, local, state, and national. He felt this was essential because these authorities had a more comprehensive knowledge of local needs. He called attention to the fact that the national association has for years advocated the creation of a division of tuberculosis in the U. S. Public Health Service. Dr. Lyman urged the tuberculosis workers to take the lead in the establishment of "health councils" in their respective states who should meet with state health officers at regular periods. And since the state health departments have a much wider view of the general health situation, these departments could help the health workers in formulating their demands upon the legislatures and thereby avoid making demands without regard to the state treasury. The need of closer cooperation with the medical profession was also pointed out.

The increasing recognition of the need of educating the nurses as to tuberculosis is gratifying. Formerly, the average nurse graduated not only without any knowledge of this disease but with a well-trained fear of it. Today the best training schools are all trying through affiliation with visiting nursing associations or sanatoriums, to remedy this defect and we may look forward to the time when tuberculosis institutions may be able to engage regular graduate nurses for their work.

Dr. Lyman felt that the greatest health question before industry and labor alike today is that of cooperative health insurance. He raised the question whether it would be possible or advisable to extend the plan already adopted by large industrial organizations, so as to take the state, which is the general public, into the partnership and to insure adequate care of all health problems which may arise among those whose earning capacity is not sufficient to provide adequately for themselves.

Dr. Charles J. Hatfield, managing director of the association, reporting for the executive office, said that the past year has been the most productive in state and local work in the history of the tuberculosis campaign in this country and predicted that greater progress will be made in the next five years than in the whole history of the movement.

The Red Cross has granted the use of its emblem and the National Association will assume business control of the sale of Red Cross seals. An intensive educational campaign for the soldiers both here and abroad is going on through leaflet, lecture, and exhibit. The national association, moreover, has been acting as a clearing house from the Surgeon-General's Office to the local community with respect to the tuberculous soldiers rejected from the camps and hospitals. The association has interested itself in providing vocational training and employment for discharged tuberculous soldiers.

Mr. John A. Lapp, managing editor of *Modern Medicine*, contended in his address on social insurance that there can be no solution of the problem of tuberculosis among working men and women without health insurance. Working people cannot stop work long enough to take proper treatment because the great majority are living only a few days or weeks away from actual want. Therefore some means to enable people to stop work and to receive adequate medical treatment must be devised. Mr. Lapp suggested health insurance as the independent, self-respecting means as against charity. He believes that a proper plan of health insurance for the tuberculous should provide for payments without limitation as to time and should provide for complete medical and sanatorium treatment as long as the patient requires it.

The question of the discharged tuberculous soldier came in for considerable discussion. The program of the Federal Board of Vocational Education with special reference to tuberculous soldiers was set forth in a paper by Dr. H. A. Pattison, medical field secretary of the National Tuberculosis Association, and Dr. Samuel M. North, S. C., U. S. A., chief of the reconstruction service, U. S. A. Hospital No. 19, spoke on occupational therapy and prevocational training for men in the service. The fields of re-education in which the tuberculous soldier can be trained are severely limited but it is of the utmost importance that these fields be carefully studied and that he be given every opportunity to restore himself to civil life and economic independence.

As usual the conference included pathological and clinical sections, the former under the chairmanship of Maj. H. J. Cooper, M. C., U. S. A., New Haven; the latter under the chairmanship of Maj. Ralph C. Matson, U. S. A., Portland, Ore. One of the most stimulating addresses of the conference was delivered by Prof. John R. Commons, professor of economics of the University of Wisconsin, on "A National Health Program." Dr. Victor C. Vaughan, dean of the Medical School, University of Michigan, Ann Arbor, was elected president of the association for the coming year.

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THE NATIONAL CONFERENCE OF SOCIAL WORK

Child Welfare, American Standards of Living, and Economic Factors in Tuberculosis Discussed—Distinguished Foreign Visitors

The National Conference of Social Work, held in Atlantic City June 1-8, was replete with interest to the workers in the health and hospital field. The subject of better health and the means of attaining it were discussed in a

broad, constructive way not only in the "permanent" section on health, but also in several other sections, notably those on mental hygiene and children. Moreover, Miss Julia C. Lathrop, chief of the Children's Bureau, U. S. Department of Labor, in her inspiring presidential address on "Child Welfare Standards—a Test of Democracy," stressed the necessity for the provision of adequate care for the health and welfare of all mothers and children as an integral part of the general welfare. "For the protection of maternity and infancy," she said, "millions are needed to provide public health nurses and all the other facilities which New Zealand has long paid for and which lowered her maternal death rate and made her infant death rate the lowest in the world. If any child or any mother has the right to life-giving care, then every mother and every child has that right, though this country has not yet recognized it by such a measure as the English law of 1918, for the protection of maternity and infancy."

The division on health, with Prof. C.-E. A. Winslow as its chairman and with a well-developed program, conducted a series of informing and stimulating meetings. The standard of living was discussed in relation to tuberculosis, medical and nursing care, infant mortality, venereal disease, family food supply, housing and the health hazards of industry. Mr. Karl de Schweinitz, secretary of the Philadelphia Society for Organized Charity, in his paper on "Sickness as a Factor in Poverty," brought out some startling figures as to the importance of the sickness factor in terms of days and money lost in the course of a single year by the people of this country. Dr. Royal Meeker's paper on "What is the American Standard of Living?" combined wit and humor with valuable statistical data. He declared there was no single standard of living, but many standards, as was abundantly attested by the statistics gathered by the Bureau of Labor Statistics, of which he is the head. Dr. Edward T. Devine closed this session with a stirring speech on the "Outlook for the Future."

One of the interesting figures at the convention was Dr. René Sand, professor of social and industrial medicine in the University of Brussels. In his address on "Minimum Standards of Child Welfare," he reviewed the remarkable growth of certain health activities during the war. "No branch of social welfare in Belgium," said he, "has responded so wonderfully to the spur of war necessities as that of child welfare. Baby clinics jumped from seven to seven hundred. Five hundred cities now care for expectant mothers where there were only two before. Before the war, the providing of lunches for school children was exceptional; during the war, every school child in Belgium received luncheon every day." Another foreign guest in whom hospital people are interested was Sir Arthur Newsholme, for many years chief medical officer of the local government board of London, England. Sir Arthur took a prominent part in the International Tuberculosis Congress which was held here in 1908. He is to spend the coming year in the Johns Hopkins University School of Public Health.

The new officers of the conference are: President, Owen R. Lovejoy; vice-president, Gertrude Vaile, Denver; Rev. John A. Ryan, Washington; Robert W. Kelso, Boston; with William T. Cross continuing as secretary. Mr. George T. Nelbach, secretary of the committee on tuberculosis of the New York State Charities Aid Association, was elected chairman of the health section, and Dr. C. Macfie Campbell, Baltimore, of the section on medical hygiene.

DEPARTMENT OF DIETETICS

Conducted by LULU GRAVES.

Please address items of news and inquiries regarding Department of Dietetics to the editor of this department, Home Economics Building, Cornell University, Ithaca, N. Y.

OPPORTUNITIES OF THE DAY NURSERY AS A FIELD FOR SOCIAL SERVICE

Opportunity for Dietetic Instruction to Families Living on Bread and Coffee—Children Improve and Interest Their Parents in Right Living—Personal Element is Vital

By NELLIE M. SARGENT, Wade Day Nursery, Cleveland

Day-nursery work offers an exceptional opportunity to the trained woman of experience to get in touch with a most interesting type of social work. Since the beginning of the Great War in 1914, the day-nursery movement has been assuming more and more importance and significance. With the entrance of women in ever-increasing numbers into the industrial world, either because they are the sole wage-earners of their families, or because of the enticement of high wages to increase the family income of the man, the problem of what to do with the children of these mothers has been an important one. Are these children going to be cared for by a trained staff of workers with careful medical supervision, proper sanitary conditions, and attention to their food, or are they to be left with a neighbor woman who is too old to do anything else? Under these conditions there is no medical supervision, sanitary arrangements are of the worst possible type, and there is no lunch for the children except a chunk of bread or sweet cake wrapped in a piece of dirty newspaper, and possibly a bottle of black coffee to drink. Cleveland is one city which found and recognized these deplorable conditions in so-called "mushroom" day nurseries. In October, 1918, through the efforts of the Welfare Federation and the Cleveland Day Nursery Association, a city ordinance was drawn up to regulate the establishment, operation, maintenance, and control of day nurseries, defining them and requiring them to be licensed. An action of this nature insures the social status of the day nursery, and the standard set has been high.

Day nurseries themselves are recognizing more and more their own possibilities for results along the lines of constructive work, with both the children and mothers with whom they work. The day nursery can occupy, it seems to me, an exceptional place as a social organization. It is an institution which has an opportunity for intimate daily contact with its families. It sees both mother and child daily and, if this opportunity is being properly used, a strong influence for good can be exerted on the families under its care.

If the nursery is to be constructive in its social work, thorough investigation of each applicant coming to its notice must be made. It should be most careful in its attempt to give relief, not to aggravate any social maladjustment which will take the mother out of the home

and relieve her of the responsibility of her children when that is not necessary. Each case should be put through a clearing house in order to enable the supervisors to know what other organizations are already interested in the family. The day nursery should consult as many of these as is necessary to secure a thorough knowledge of the family situation and history. It should also recognize its own limitations in handling family problems and be ready and willing to refer the family to any other organizations which would be better fitted to handle any given family situation. A home investigation should also be made in order to understand and know the actual living conditions of the family. If there is already some other organization caring for the family and if it has referred them to the day nursery, a home investigation is not always necessary.

Nursery records are another essential to good constructive work. They should contain all necessary identifying information concerning the family and should also note important happenings as they occur during the period the family is receiving nursery care. Such notations as medical attention given to the family or any other changes which affect the situation are all important, especially when the record is reviewed as past history.

There are many opportunities for excellent work with the children in the day nurseries. The child's mind is particularly receptive; it can be trained in proper ideas of cleanliness, neatness, order, courtesy, and all the habits which go to make up character. Also, through proper medical supervision and instruction to the children in the care of their teeth and of their bodies, proper physical care can be given. This is significant because in many cases the only training and care the children get at all comes to them at the nursery. It is a very noticeable fact that often our children are much better behaved with us than when their own mothers are taking care of them. In Cleveland there are no agencies which give special attention to the physical and medical needs of children between the ages of three and six years. The day nursery can do much for the children under its supervision by noting physical defects and referring them to medical dispensaries for correction.

Another very important factor in day-nursery care is the diet. Children generally found in a day nursery are those in whose homes the lack of proper food, especially proteid, is always found. Black coffee and bread make up the bulk of the diet at home as a general thing, and, if milk is used at all, it is in very limited amounts, far insufficient to meet the ordinary requirements, or else some form of condensed milk, is used. The nursery diet for the children should be planned to make up for the deficiency at home as much as possible. In planning the diet, it is very important to consider the age and nationality of the children and to try to teach them to eat the foods to which they are not accustomed. It is not uncommon for a small child of possibly a year and a half to refuse milk simply because he is not used to it. Nursery diet should always include a liberal supply of milk, one quart a day for each child, and eggs as often as possible. Results of proper food are noticeable very quickly. It is most interesting and satisfactory to watch the improvement in the children, especially the very small ones, after a few weeks of nursery care and food. One mother who had two small children with us, came to me one day and asked what kind of medicine we gave her children, saying they had improved so much. Here was an opportunity which we quickly used to explain to the mother just how and what we gave the children to eat and the importance of fresh milk. We found that they had had nothing but condensed milk since she had stopped nursing them. Fresh fruits and vegetables, cereals, and some meat, especially for the older children, should always be found in a properly regulated dietary.

The school children also need care and attention as well as the younger children. In some of our clubs, which have been established here at Wade Nursery for older boys and girls, it has been most interesting to notice the difference between nursery children and neighborhood children. Here is another opportunity which I think the day nursery should recognize. It trains and cares for the children, perhaps up to ten or twelve years, and then sets them adrift as no longer needing nursery care. As a matter of fact, it is just at this time when the influence of the street can be most dangerous to the child. I feel that the nursery should in no way try to be essentially a neighborhood settlement house until it has put forth an effort to carry on the good work it has already begun, by offering its former nursery children the opportunity of clubs and classes at the nursery. The interest of the children is already in the nursery if their care and training there have been of the proper kind, and it is not at all difficult to keep this interest. They naturally like to come, they enjoy themselves there, and will come and make the most of these opportunities offered after school hours. Sewing, cooking, games, etc., can all be offered as in any settlement house, but the main effort should always be to hold the nursery children, and then later, as the work enlarges and funds and workers can be increased, more neighborhood work can be undertaken if it is practicable to do so.

Last winter, the Wade Nursery tried out a very new and interesting experiment. Through the cooperation of Miss Adelaide Van Duzer, supervisor of the domestic science in the Cleveland public schools, it was arranged to have one of the cooking classes of a nearby school come to the nursery every Thursday afternoon. These girls prepare one hearty dish of high food value under the direction of their domestic science teacher. The nursery mothers can buy this food at cost to take home for their suppers. The response the mothers have made to this has been most gratifying. We do not urge or force this food upon them in any way, and it has been very noticeable, also, that often the only reason some of the foreign mothers buy is the persistent urging of their children, who like the particular dish which is on sale. With a little thought, the far-seeing effect of such work as this can easily be seen for the children, as well as its possibilities for the education of the mother.

The nursery can do much for its mothers as well as its children. It has the opportunity to be of wide service and influence. This influence can be gained at first through the natural interest of the mother in what is done for her children at the nursery. She comes to feel that the nursery people are her friends, always ready to help her in any difficulty which may come. As this confidence is established, she will ask for advice and counsel. Family troubles and affairs can often be immediately noticed at their beginning if proper attention is given to evidences of any irregularity. Many times disastrous results can be averted through wise counsel and direction of the mother to other agencies which will cooperate and assist her in her particular difficulty, agencies of whose existence she may be entirely ignorant except for the day nursery. Besides this material aid, it is possible to give what I think is often more important. These mothers need a friend, they need a word of encouragement. Often a cheery, "Well, how has the day been today?" or a similar casual

question will bring forth many things. By an attempt to gain her confidence through personal help, to solve her difficulties and bear a part of her heavy burdens, an influence can be created which is very potent and worthwhile in its effect upon the life of the family.

After the mother's confidence has been gained, much can be done in regard to ideas concerning the health, sanitation, and methods of right living of the family. The nursery house itself can set an example of order, cleanliness, etc., which will have an effect even if it is not always apparent. The educated woman has books and courses at her command and need not continue her serious mistakes. She is accustomed to standards of neatness, order, proper physical care, and other living conditions established by the customs of the circle of her friends. The uneducated, untrained woman and even the educated, trained, foreign woman suddenly placed in one of the crowded sections of our American cities, has no such advantage. She has little opportunity to learn American ways and little time to learn English. She vainly tries as best she can to adapt her peasant methods to conditions she finds here. Perhaps in her own country her standards were comparatively high, but some unfortunate family difficulty after she came here has forced her to live on a very low income. The lower her income the greater her need for the fullest training and knowledge of proper home management. The need for educational work along this line is practically universal. It applies to the young married American mother who has always done factory work as well as to the foreign mother. Very few of these women are at all familiar with the simplest principles of nutrition, which would give an intelligent choice of foods. Very few have a knowledge of comparative food values, kinds of clothing, household materials and supplies, and they have no means of knowing how to spend their scanty income to the best advantage. In many of these families the main diet for all, as has been before stated, is bread and black coffee; they buy just enough for one meal at a time. There is general neglect of the health of the mother and of the children as well. Their sleeping rooms are unventilated and the windows closed, very often as a measure to save fuel and bed covering. The nursery has the opportunity to supplement the improper diet of the children, and, through advice to the mother and encouragement by home visiting, noticeable results can be accomplished to improve home conditions. This phase of the work requires much patience and perseverence, and often a long period of time has to be covered before results are at all apparent, but the opportunity is there, and the home follow-up work can be developed and a large amount of real help given.

The nurseries may also offer the mother some opportunity for recreation. These women's lives are generally of necessity very bare of any form of recreation, partly on account of the fact of their having to work so hard and partly because they are generally too tired or cannot leave the children in the evening to go out. It is surprising what good times these mothers find in the simplest kinds of amusement. There is much need for a little play element in their lives, and the nursery mothers' parties are a source of much enjoyment. They can also be instructive as well. Last year when the call came for the use of substitutes and we found our mothers were buying flour and stacking up their shelves with the substitutes, we arranged several very enthusiastic cooking parties—with practical demonstrations. Our results were evident when some of the mothers brought some samples of their cooking to us a few days later.

To be effective and make the most of its opportunity as a constructive social force, the day nursery must have a capable working force to give proper physical care to the children; it must have a thorough knowledge of existing social conditions, and the types of service rendered by other organizations in the community; and, above all, its most effective far-reaching results must come from the deep, personal friendship established with the mothers and families with whom it comes in close contact. I have attempted to outline some of the possibilities and opportunities which are to be found in day-nursery work for the children and mothers which come under its care, but this element of personal friendship needs a little emphasis. As a day nursery superintendent, I have found much joy from the fact that I can bring possibly just a little ray of hope and sunshine into the lives of these hard-working mothers with whom I come so closely in contact, and from the fact that the possibilities and opportunities for service to them and to the community are almost limitless.

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COST-OF-LIVING INVESTIGATION IN THE UNITED STATES

Workingman's Diet Faulty More Through Ignorance Than Poverty—Too Little Milk, Eggs, and Leafy Vegetables

By EDITH P. NASH, Bureau of Labor Statistics, United States Department of Labor

For the past year and a half, the bureau of labor statistics, U. S. Department of Labor, has been making a national cost-of-living investigation.

From January to August, 1918, an investigation was made in all shipbuilding centers on the Atlantic, Gulf, Great Lakes, and Pacific coasts. These studies proved so valuable that the President made a larger appropriation for making a country-wide study of the cost of living, which lasted from September, 1918, to April, 1919, in all the principal industrial cities and in a few small mining towns as well. The schedules were much more detailed than for the shipbuilding investigations, hence more accurate.

The purpose of both investigations was to adjust wages. The demands of workingmen for increased wages on the ground of increased cost of living could be dealt with intelligently only by securing figures showing the increases in the cost of living.

The wives of the wage-earning men, therefore, were visited, and information was secured from selected eligible families concerning income and expenditures for the preceding year. The expenses included food, clothing, housing, fuel, furniture and furnishings, and miscellaneous items, food being by all means the most important and likewise the most difficult to secure. These schedules were, of course, only approximate as, unless the housewife kept accounts, she could not tell exactly the number of pounds of steak, quarts of milk, and pecks of potatoes she bought during the year, but the schedules were a very good estimate and the only way, in fact, of getting at the cost of living.

As to expenses in general, it took all of the earnings to feed, clothe, house, etc., the family. Fifty dollars or $100 might have been invested in Liberty Bonds, but seldom were there savings in the bank. The average workingman's family spends practically all it makes. The amount spent on food varies, of course, with the size of the family and income; clothing, as a rule, is insufficient for winter wear; rent averages from $12 to $20 a month; what furniture is bought is invariably got on the installment plan; of the

miscellaneous items, those which are most important are doctor's fees, medicine, and insurance. The doctor's bill is low enough but the dental fee is even lower, for while these people's teeth need attention badly enough, they are sorely neglected until an abcess forms or toothache keeps them awake all night. The wage earner's family carries a heavy insurance, in several companies often and for each of the children, for, as the wife says "If the children should die, we wouldn't have the money to bury them."

But, as regards food in particular, I feel I can safely say that there was scarcely a single family that had a well-balanced diet, even though a sufficient amount was spent on food to provide a much more wholesome diet. Very few wage-earners' families are as well fed as they should be on their present incomes. If we examine their dietary, we will find excessive amounts of meat, white bread, potatoes, tea and coffee, with a minimum allowance of milk, butter, eggs, fruit, and leafy vegetables, the very foods which are so essential. The reason for such a diet is obvious. The husband demands meat every meal as he does hard manual work and requires heavy food, thinking meat to be the only strength-giving food. Milk at sixteen cents a quart is too high and a waste of money, not being necessary anyway for the children, so he thinks. Therefore, the children get very little if any milk to drink. The effect of such a diet on the husband is not so marked as on the other members of the family. The wife at the early age of thirty-five begins to look aged, due to improper food rather than overwork. The children, many of them, are anemic and thin, and cases of rickets and infected eyes are not uncommon.

To give a specific instance: In Baltimore I encountered a colored family with two children. The elder, a boy four, and the younger, a girl two, each had a bad case of rickets and diseased eyes, while the girl had besides these an infection on the leg, which appeared to be ulcerous. I insisted on the child being carried to a doctor, but not until I had a visiting nurse call was she taken to the hospital and given the necessary attention. With regular treatments, the ulcer healed without an operation. By corresponding with the mother I was glad to learn that the child was responding to the treatment and was much better in every way. The diet, too, moreover, had been changed, owing to the advice I had given her. Their previous diet had consisted of fat pork, chicken, white bread, potatoes, cornmeal, and coffee, with no milk, eggs, fruit or leafy vegetables. The children were fed the same foods the parents ate and in about as large quantities.

I once visited a young mother whose baby was but one week old. She complained of having no milk for the infant and, on examining her dietary, I learned that she had drunk not a drop of milk since the child had been born. Her dinner, which was served while I was there, consisted of buckwheat cakes, sausage, and tea. And then she wondered why she did not have milk for the infant!

Oh, how ignorant the public is regarding the nutrition of man! With the wage-earning class, it is not that they cannot afford the articles of food they ought to have, namely milk, eggs, and leafy vegetables, but rather their individual preference in the selection of food and utter indifference to the best body-building foods for their children. There are exceptions, which, however, are a small percentage. It is from personal observation that I speak, of the hundreds of homes I have visited and the hundreds of housewives I have questioned about food consumption, and my conclusion is this: The diet of the average workingman's family is such as to impair the health of each of its members. Most serious a problem is it that the child is improperly nourished, and, while we cannot hope to reform the adult life in this generation, our only hope is with the children who will be the men and women of tomorrow.

To all mothers I give this challenge: Use thought in the selection of food for your child with a plentiful supply of the protective foods, milk, eggs, and leafy vegetables, milk especially, for the building of a strong body and, ultimately, a strong mind.

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Points for the House Visitors

The field dietitian, the visiting housekeeper, or any one engaged in house-visiting service will find the papers by Miss Nash and Miss Sargent of especial interest. The points made by Miss Nash relative to premature aging of wives and mothers is well worth emphasizing as is also the fact that indifference rather than poverty is the cause of malnutrition in a large percentage of families of the wage-earning class.

The work of the Wade Day Nursery, as reported by Miss Sargent, is but another illustration of "how far a little candle throws its beams."

The cooperation with the public schools is a good move in the right direction.

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TENTATIVE PROGRAM OF THE AMERICAN DIETETIC ASSOCIATION

Meeting To Be Held in Cincinnati in September—Interesting Discussion and Papers Planned—Good Division of Subjects

We are glad to be able to present a tentative program of the annual meeting of the American Dietetic Association, which will be held this year in Cincinnati, September 8-12. As will be noticed, many phases of the work done by dietitians is covered. Tuesday's program is devoted to the training and teaching of dietitians both in schools and in hospitals; Wednesday, the practical and executive features will be discussed; Thursday, Miss Hyde of the Cincinnati General Hospital is planning a program for the day spent there which will be profitable, interesting, and entertaining; Friday will be a day filled with things every dietitian should hear and know about.

TENTATIVE PROGRAM OF THE AMERICAN DIETETIC ASSOCIATION

TUESDAY, SEPTEMBER 8, 1919.

Morning, 9 A. M.: General Session.

Courses of Instruction for the Training of Dietitians, Katherine Fisher, Teachers College, Columbia University, New York City.
Discussion led by Lenna Frances Cooper, supervising dietitian, War Department, Washington, D. C.
Training of Pupil Dietitians, Violet Ryley, general organizing dietitian, Soldier's Civil Re-establishment, Toronto, Can.
Discussion.

Afternoon, 2:30 P. M.: Section Meetings.

Section on Teaching—Katherine Fisher, Teachers College, Columbia University, New York City, chairman.
Standard Curriculum for Nurses' Training Schools, Ruth Sherlow.
Discussion.
Section on Social Service—Blanche Joseph, field dietitian, Michael Reese Dispensary, Chicago, chairman.

WEDNESDAY, SEPTEMBER 9, 1919.

Morning, 9 A. M.: General Session.

Hospital Cafeterias, Eleanor Wells, Teachers College, Columbia University, New York City.
Discussion led by Seale Harris.
College Feeding Problems, Emma Baker.

Afternoon, 2:30 P. M.: Section Meetings.

Section on Administration—Emma Smedley, director school luncheons, 1425 Brandywine St., Philadelphia, chairman.
Problems in the Administration of Government Dormitories, Olive Davis.
Section on Dietotherapy—Minnie A. Phillips, metabolism ward, University of Iowa, chairman.
Paper by Dr. Baumann, University of Iowa.

Evening, 8 P. M.: General Session.

What We Have Learned in Dietetics From the Army, Col. R. H. Murlin.
Food Waste, Lieut.-Col. Ernest Irons.
Food Clinics, Bertha Woods, Boston Dispensary, Boston.

THURSDAY, SEPTEMBER 10, 1919.

Program furnished by the Cincinnati Hospital.

FRIDAY, SEPTEMBER 11, 1919.

Morning, 9 P. M.: Business Session.

Paper by Mary Swartz Rose, Teachers College, Columbia University, New York City.

Afternoon, 2:30 P. M.

Report of the American Home Economics Association Meeting.

Report of the committee on standardization of curriculums for the training of dietitians.

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NEWS NOTES OF DIETITIANS

The Chicago Committee on Dietetics held a meeting in the executive offices of the chapter, April 7. The report of this meeting in part reads as follows:

"The aim of the meeting was to discuss plans for broadening the scope of the instruction in Red Cross home dietetics.

"Miss Minnie H. Ahrens, director of central division Red Cross nursing service, told of the public health peace plans of the Red Cross. The nursing service aims to spread the teaching of hygiene and home care of the sick and home dietetics all over the United States. It believes in prevention as well as cure, and feels that there is an opportunity now in the hands of the Red Cross worker to do a piece of wonderfully constructive educational work.

"Dr. Gentles, chairman of Red Cross first-aid department, told the meeting how the teaching of first aid has been carried into the industrial plants.

"Plans were discussed for developing teaching of dietetics on a bigger scale, through cooperation with parent-teachers organizations, public health community center committees, visiting nurses associations, Chicago hospitals and infant welfare associations. It was decided to make a brief survey of the work being done already in Chicago by these associations. . . . It was decided that the main thing that the dietetics department of the teaching center needs is more workers to organize classes. Suggestions as to capable workers are desired from the members of the adivsory committee. People who are keenly interested in pushing the teaching of proper food values, the value of a quart of milk a day, and other essential features, are needed at once."

Mrs. Madeline F. Mehlig, chairman, dietetics committee, Chicago chapter, Teaching Center, also made this report:

"I have visited the Chicago Day Nursery Association's annual meeting and talked to them about the advisability of using the day nurseries as centers to teach the mothers the principles of nutrition. Much has been done through these nurseries in weighing and measuring the children. One nursery, the Lucy Wells School Nursery, has a model center with a dietitian in charge, directing the dietary of the children. However, I feel that not enough follow-up work is being done in this child welfare work. Little good can be accomplished unless the mothers can be taught the ways and means for caring for the health of the child.

"A letter has been sent to all hospitals not having a resident or visiting dietitian, stating our desire to cooperate in giving instruction to student nurses. Favorable replies are coming in. I have had two conferences with members of the school board on the establishment of classes for the parent-teachers association and the community centers committee.

"A series of Wednesday free lectures on the relation of food to public health was started, April 30, and a letter is being sent to all practical and graduate nurses, urging them to equip themselves with fuller knowledge of dietetics. The executive committee of the chapter has agreed to reduce the fee for this instruction to a minimum of $2.50 for fifteen lessons. It is hoped that many will take advantage of this summer course."

Miss Marlatt, director of home economics, Madison, Wis., is very anxious to push the teaching of home dietetics in Wisconsin. She advocates the supplementing of the work of the home demonstration agent with that of the Red Cross dietitian. Miss Marlatt says there should be a distinction in the work of these two but both are needed.

The Baptist Memorial Hospital, of Memphis, Tenn., is enrolled with the hospitals desiring an up-to-date dietary department. We predict great success for them since they have placed the developing of this work in the hands of Miss Louise Stevenson. Miss Stevenson was formerly at Michael Reese Hospital, Chicago, and more recently at Camp Custer, Battle Creek, Mich.

Miss Ruth Dodge is at Woodmen, Colo., supervising the preparation and serving of the food in the Woodmen sanatorium.

Miss Ardelle Ferguson, formerly at the University Hospital, Atlanta, Ga., is now dietitian at the Pottsville Hospital, Pottsville. Pa.

Miss May Foley, who did such a commendable work at the Base Hospital in Fort Riley, Kas., has been appointed dietitian of the Public Health Hospital in Baltimore. The bureau of public health has become aware of the value of dietitians and they are planning to establish these departments on the best possible basis.

Miss Helen M. Weaver, formerly dietitian at the Woman's Hospital of Philadelphia, and Miss Louise Lauer, assistant dietitian, have left that institution to take charge of the Household Science Kitchen, 1909 Arch St., Philadelphia. This lunchroom has the novel feature that all of the cooking and serving is being done by household science graduates. The plan of operation was worked out by John B. Leeds, Ph.D., author of "The Household Budget."

BOOKS RECEIVED FOR REVIEW

Clinical Diagnosis. A Manual of Laboratory Methods. By James Campbell Todd, M.D., Professor of Pathology, University of Colorado. Fourth edition, revised and reset. Cloth, pp. 687, with 244 illustrations, $3. W. B. Saunders Company, Philadelphia, 1919.

Essentials of Surgery. A Textbook of Surgery for Student and Graduate Nurses. By Archibald Leete McDonald, M.D., Lecturer on Surgery, Nurses Training School, St. Luke's Hospital, Duluth, Minn. Cloth, pp. 265, with 46 illustrations, J. B. Lippincott Company, Philadelphia. $2. 1919.

Re-Education of the Maimed. By Jean Camus. Authorized translation by W. F. Castle, Surgeon R.N. Cloth, pp. 195, with 64 illustrations. $2. William Wood and Company, New York, 1919.

Quarterly Medical Clinics. By Frank Smithies, M.D., F. A. C. P., Associate Professor of Medicine, School of Medicine, University of Illinois. Paper, pp. 188, with 42 illustrations and 2 charts, $1.50. Medicine and Surgery Publishing Company, St. Louis, 1919.

Electricity in Medicine. By George W. Jacoby, M. D., Consulting Neurologist to Lenox Hill Hospital, New York, and J. Ralph Jacoby, A.B., M.D., Fellow of the New York Academy of Medicine, and Chief of Clinic, Neurological Department, Lenox Hill Hospital. Cloth, pp. 612, with 262 illustrations, $5. P. Blakiston's Sons & Co., Philadelphia, 1919.

Eminent Victorians. By Lytton Strachey. Cloth, pp. 350, with portraits, $3.50. G. P. Putnam Sons, New York, 1919.

Squibb's Atlas of the Official Drugs. By William Mansfield, A.M., Phar.D., Dean and Professor of Pharmacognosy and Botany, Union University, Albany, N. Y.; Late Professor of Biology and Pharmacognosy, Columbia University, New York City. Cloth, pp. 686, with illustrations. E. R. Squibb & Sons, New Rork, 1919.

Ultra Violet Rays in Modern Dermatology. By Ralph Bernstein, M.D., Professor of Dermatology, Hahnemann Medical College, Philadelphia; Consulting Dermatologist to The Women's Southern Homeopathic Hospital, Philadelphia; Consulting Dermatologist to Hahnemann Hospital Dispensary, Philadelphia. Cloth, pp. 162, with illustrations. Achey and Gorrecht, Lancaster, Pa., 1918.

DEPARTMENT OF NURSING

Conducted by ANNIE W. GOODRICH, Dean Army School of Nursing and CAROLYN E. GRAY, R.N.

Please address items of news and inquiries regarding Department of Nursing to CAROLYN E. GRAY, R.N., Secretary of the New York Board of Nurse Examiners, 135 E. 45th St., New York City.

A NEW METHOD FOR THE TRAINING OF NURSES: AN IDEA, NOT AN INSTITUTION

Twelve Weeks' Intensive Training in High Schools Saves Pupil Nurse a Year of Time—Theoretical Side of Nursing Better and More Quickly Taught

By WILLIAM A. WALTERS, M.D., Billings, Mont.

Stimulated by the ideas brought out in a conversation with the late Dr. Charles R. Van Hise, of the University of Wisconsin, who attended our alumni meeting at Butte, Mont., I was impressed with the thought that we were decidedly asleep in the matter of the production of nurses for our military and civil needs. We have had laborious three- or four-year courses of training for these young women in order that they might obtain their certificates of graduation, and it occurred to me during the course of this conversation that this condition could be corrected and that we had right at our elbow facilities which had formerly been overlooked in the training of nurses. I refer to the high schools.

At the close of our alumni meeting, Dr. Van Hise asked me to go to Helena and see those in authority for permission to carry out these matters which we had talked over. I went first to the governor of the state and asked to be allowed to lay the matter before the state superintendent of public education. He kindly consented. I then went to the Montana State Board for the Examination of Nurses and obtained their cooperation in this matter. They submitted the following course of instructions:

The Montana State Board of Examiners for Nurses recommend the following outline as an intensive summer course in nursing for students who have had not less than two years of high-school work.

Subject	Text books	Hours
Anatomy and Physiology—Laboratory Technique	Kimber	102
History of Nursing	Goodnow	4
Household Economics (including domestic science, cooking and household management, preparation for meals and calculation of food values)		72
Hygiene	McIsaac	6
Bacteriology (to include Laboratory Technique)	Bolduan-Garund	72
Principles of Ethics		4
Elements of Psychology		10
Sociology		8
English (including the ability to speak the English language correctly and the power to write and spell the English language in a correct, orderly, and fitting manner.)		72
Mathematics (the ability to deal with problems, including fractions, percentage, and the decimal and the metric systems)		43
Chemistry (including elementary general chemistry with laboratory practice, also household chemistry)	Pope	36
Public Sanitation, to be taught by health department, either state or local		3

A resolution was passed by the State Board of Nurses Examiners to recommend to the nurses' training schools of the state, that they give one year's credit to the young women presenting certificates that they have successfully completed this intensive summer course.

Girls cannot be admitted to the nurses' training schools of the state until they are eighteen years of age, though the intensive summer course may be taken earlier.

Studying this list of subjects, we found that much of the didactic work in the curriculums of these various hospital training schools could be taught very readily in our high school. We found that we had better facilities in the high school for teaching the fundamental subjects such as chemistry, anatomy, physiology, dietetics, and biology than were to be found in the average hospital, and we decided that the preliminary training for these girls could be better done in the high schools than in the hospital.

Why can't our high schools prepare women to be nurses just the same as they prepare them to be stenographers or bookkeepers? The buildings are idle in the summer and so are the instructors and scholars. Now is no time for slacker capital invested in high schools and also no time for slacker students or instructors. These are busy days of reconstruction. Let us standardize our courses for nurses just as we have our dollars, so that they will be the same anywhere in the United States.

The work of the high schools, of course, had to be standardized so that the young woman who took training in Billings could, if she chose, take her credits to any training school in the state and receive recognition. We formulated a course of study occupying approximately six hours a day and lasting for twelve weeks which prepared our young women very well to enter the hospital and take up the so-called "practical duties" of nursing.

This experiment was begun at the opening of our summer vacation period. In conjunction with this course, there was a night-school course of home nursing which was more practical and was intended for the women of our community who had little or no educational advantages. This course was later absorbed into the first-aid course which was given by the Red Cross and, needless to say, it became very popular. We found that our women were eager to learn how to make a bed, to bathe a patient, put a patient to bed, how to take temperatures, and how to give enemas, etc. A number of these women qualified as nurses' aids and went overseas in that capacity. A great many of them remained at home and were a godsend in the subsequent influenza epidemic which so terribly devastated the community.

It occurred to me, in this connection, that a standard course of instruction could well be adopted by the high schools throughout the United States so that a young woman could receive her preparatory training in the fundamental sciences and then enter her course of training in any hospital with a standard list of credits and a much fuller idea of the work ahead. I believe that hospitals throughout the United States would welcome a class of women who were properly prepared to enter their institutions and undertake intelligently the practical side of nursing.

Under our present methods of teaching nurses, we have taken young women with the average educational attainments and have put them in the menial work of the hospital training schools as probationers for the first six months. In many instances ambition has been stifled in them when they were made to mop floors and polish brass and do other duties that are entirely out of the realm of nursing in any manner, shape, or form. Another fault in the old system is that the young women in the training schools of our hospitals received their class-room instructions after supper. They are tired out with the efforts of the day and it is hardly to be wondered at that the work is not properly received by them. By the plan we devised, the girls are taught in the daytime in bright, cheerful surroundings and by a group of instructors who are far better equipped to teach these subjects than the average practitioner of medicine, and the students get a great deal more out of their work in a much shorter time. The average high-school instructor in science knows more about the chemistry he is teaching than the average practitioner does, and we found under the old methods that our girls were being taught subjects by physicians who had not studied them since leaving school. They were teaching these subjects in a very indifferent manner and in a very meager way to a group of girls who were entirely too tired to receive the instructions profitably, to say nothing of the instructor being too tired to teach his subject well. Again, it often happens that the physician could not leave his work to lecture at a given time and consequently the entire class would go without instructions and be dismissed.

Our experiment proved that we were right and that the pupils learned in a period of twelve weeks' time virtually all of their fundamental sciences and learned them better under this system of high school instruction than they would have learned them under the instruction of the general practitioners who were rusty in the work and who were attempting to teach a group of girls who were literally tired out.

Most of the work was taught by the instructor of science. The course in domestic science and dietetics was taught by the domestic-science teacher. The courses were so arranged that one teacher taught her subject for full days for a few weeks until it was finished, when another teacher took her place. In this way no teacher was obliged to stay the full summer term, but each one left for vacation as soon as her subject was finished and consequently obtained the major part of the summer for her rest.

We have incorporated with our high school work a practical course of nursing for the girls in the upper classes. These young women are taught by our school nurse the principles of practical nursing, and we hope by this means to encourage more of these young women to undertake this intensive course of training and go on through hospital work.

The cost of this training was borne by the community, as it should be. Our local board of education was certainly most generous in furnishing us with instructors through the summer time, and we found at the close of the session that it had cost the school board a very reasonable amount to prepare a group of girls who had actually saved themselves one year of their lives in training to become graduate nurses. This twelve weeks of instruction gave them one years' credit in their course of training. The state board of nurses were quick to see the great advantage of preparing nurses in this way in a short time for the nation's need and should certainly be thanked for their hearty cooperation.

CONSERVATION THROUGH CORRELATION OF EXISTING AGENCIES

The Dream of a "Central School" To Be Partly Realized Through Cooperation With Existing Centers—Hospital and High Schools Should Serve the Community Together

The idea presented in Dr. Walters' paper (published above) is not new but the fact that the idea was translated into action is both interesting and gratifying. In nursing, as in other departments of education, we need ideas, and, still more ideas that are successfully worked out, for we already have too many institutions, not alone of brick and mortar, but of precedent and tradition, and a too great reverence for the way "things always have been done."

The scheme Dr. Walters has outlined has some points in common with the Vassar experiment. However, the latter was for college graduates, and the use of the college property was a war contribution, possibly of too great value to be expected in peace time. But practically every city of any considerable size has one or more hospitals with limited facilities for laboratory teaching, which are struggling with the problem of providing scientific education for pupil nurses; and has also high schools equipped with laboratories that are in use usually not more than half the time.

The growth of nursing schools has been so rapid and the difficulties nurse instructors have had to overcome in order to secure adequate preparation to teach the many subjects required in a modern curriculum, have been so great that the available number of properly qualified instructors is all too small to meet the demand for their services. Consequently, we have many schools ready and willing to employ qualified instructors that cannot obtain them. This group, plus a still larger group of schools that cling to the tradition that doctors are qualified to teach any scientific subject and can usually be depended upon to give such services gratis, would be immensely benefited by cooperation with existing high schools that possess adequate teaching facilities and properly qualified teachers.

One of the dreams of many of the leaders in the nursing world has been of a so-called "central school," where the prospective training-school pupils from a given area could take their preparatory work and enter the nursing schools ready to take up the practical work. There seems to be no reason why existing high schools cannot serve many of the purposes of the "central school" until such time as the growth of hospitals makes the demands on the high schools too onerous. Naturally, strictly nursing subjects can be taught in the hospital to better advantage, but scientific subjects, i. e., biology, bacteriology, chemistry, physics, dietetics, etc., could be taught to larger groups in better-equipped laboratories and by better-prepared teachers than they are at present in the average hospital with average equipment and the average type of instructor. This statement is true not only for nurses in the preparatory period, but for those in the junior, intermediate, and senior periods as well, as it is neither practical nor desirable from a pedagogical standpoint to crowd all of this instruction into the preparatory period. Much of it should be correlated with the practical experience the pupil gets in the hospital, and, to be of the greatest value, should be given as nearly as possible at the same time.

One of the objections to such a scheme has always been that it took too much time for the pupils to travel to and from the high school, but now that we are being forced to admit that the hours of duty exacted of pupil nurses

are unreasonably long and must be shortened, it is possible that this objection will not carry so much weight. The advantages would be not only better teaching, better facilities, and standardized instruction but also a profitable mingling of students from various nursing schools, which would in time help to break down their "splendid isolation." It would mean also a saving of expense by those schools which give their pupils such instruction as is worth paying for and a marked improvement in the quality of the teaching given in schools that depend upon the volunteer services of those who are not primarily teachers. It would seem not only possible but highly desirable that these courses of instruction should be standardized to the extent that a student who resided in Montana might have her preliminary course recognized not only in any city of Montana, but in any city of any state, for instance, Illinois or Massachusetts, and thus be able to enter a nursing school located in Chicago or Boston.

Without doubt hospitals would welcome classes of pupils so prepared, particularly just now when from many quarters one hears of a dearth of applicants and a lack of interest now that the "war motive" cannot be used as an incentive. Many of us know, to our sorrow, that the work required of pupils does stifle ambition and often drives valuable recruits from our schools. Yet when superintendents protest against this work being required longer than is necessary for the pupil to learn the necessity for it and the routine for accomplishing it, we run counter to the tradition that any hard or disagreeable work that the hospital requires can be done in the best and cheapest way by turning it over to the pupil nurses and making it a responsibility of the training school. Not alone mopping floors and polishing brass but many other duties are required long after every atom of educational value has been extracted and the period of drill necessary for acquiring skill is long since past.

It is a pleasure to testify that most schools have discontinued night classes, and it ought to be a comfort to those who are struggling with the problem of introducing the eight-hour day, to remember that at one time the abolition of night classes was considered quite "unnecessary and impossible."

It is of interest to note that the cost of the experiment in Billings was borne by the *community;* this strengthens our belief that the proper education of nurses and the content of what that education should be are of vital interest to the community and should be determined not by any one institution or group, but by all the citizens of the community which hospitals and nurses both exist to serve.

Perhaps a concrete example of possibilities in this connection may clarify the points of this discussion and the example of the municipal hospitals of New York City may serve this purpose. For the benefit of those not familiar with the complexities of the municipal hospital problem in New York, the departments under which these hospitals are grouped may be outlined as follows:

1. The health department maintains hospitals for the care of communicable diseases, i. e., scarlet fever, measles, diphtheria, smallpox, tuberculosis, etc. These hospitals do not have training schools but instead depend upon graduate nurses. They are frequently short of nurses and try to attract postgraduate students as well as to obtain affiliating pupils from training schools. The health department also has a staff of school nurses and a staff of nurses for visiting cases of communicable diseases. The latter is the nearest approach to a municipal visiting nurse service the city now has.

2. Bellevue and Allied Hospitals, i. e., Fordham, Harlem, and Gouverneur, are managed by a board of trustees which consists of seven unpaid men, appointed by the mayor for a period of seven years. Bellevue Hospital maintains a training school and gives the pupils a broad and varied service. At the three Allied Hospitals the nursing is done partly by postgraduate students and partly by affiliated pupils from a large number of small schools that cannot within their own hospitals provide the variety of services required for the all-around training of a nurse.

3. The department of public charities has charge of a number of hospitals, in four of which training schools are conducted, i. e., King's County Hospital, and Cumberland Street Hospital, Brooklyn; and City and Metropolitan Hospitals on Blackwells Island.

From this, it will be seen that the city of New York conducts at least five separate schools for the education and training of nurses. Each one is separate and distinct, maintains its staff of instructors, gets as much equipment as it can, and prides itself on the fact that it is not connected with any other school!

In addition, the city of New York has an education department with many high schools and, at present, there is no connection whatever between the nursing schools in the various hospitals and the high schools. Yet they are all city institutions, supported by the taxpayers, and designed to serve the interests of the community. Suppose we allow our minds to play over the possibilities of the various departments coming together and combining forces so that one big nursing school instead of five small ones would serve the hospitals. Then imagine, if you will, an elective service in communicable diseases being provided by the hospitals of the health department and also a public health service being provided by an extension of the school and visiting-nurse departments. Then think of tying up this big nursing school with the educational system so that all the sciences would be taught in the high schools. This would bring the hospitals and schools into a close relationship that would doubtless prove of value, not only to the hospitals, but to the high schools, for the hospitals should not be parasitic in their relation to the high schools but should offer their best facilities for health teaching and prevention of diseases to high-school pupils.

One wonders if in some such way as this sketchy outline indicates it would not be possible to build up a big nursing school that would offer such sound scientific education, such varied training, such a wealth of elective services, combined with such unusual opportunities for the study of social problems, that it would attract sufficient students to relieve the chronic shortage of nurses in our municipal hospitals and help to meet the demand for properly prepared public health nurses. It seems not too visionary to think of such a nursing school being a leader, and the poor of the city being better cared for under this system than is possible under conditions that today make it difficult to attract even the minimum number of pupils to our nursing schools.

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Public Health Service Nurses Wanted in Montana

Montana has issued a call for more public nurses. In connection with Surgeon-General Blue's recent statement that there should be a public health service nurse at work in each county, statistics indicate that Montana falls far short, lacking sufficient nurses to supply even one-third of its counties.

THE MODERN TRAINED NURSE

She Must Have More Special Training and Be in Closer Touch With Social Service Work—Time to Be Given Through Eight-Hour Day and Freedom from Housekeeping Detail

By MAUDE McLEOD, Superintendent of Nurses, Vancouver General Hospital, Vancouver, B. C.

The nursing profession was called into existence by the real needs of suffering humanity. It is the only profession women can claim as their own. It is a profession exalted by intellect and culture. Yet we are told that there is something wrong with the training schools of today.

The doctors claim that the trained nurse is not efficient. Superintendents of training schools say there is something wrong, and the lay public finds something radically wrong. If we could come to a satisfactory diagnosis of the case, I am sure among us we could establish a training school capable of training women such as John Allen described as "not existing on this side of the pearly gates."

I am not going to inflict upon you a history of the progress and growth of the nursing profession. Sufficient to say that the Montreal General Hospital can boast of the first training school for nurses in Canada. This school was opened in 1890, and Dr. R. E. McKechnie, of this city, was among the first to lecture to the nurses. In the United States, the training school dates back fifty years, and during these years it has made rapid strides. A number of these schools now have university affiliations, preliminary courses, and almost all have paid instructors.

The duties of the student nurse in the large general hospital are quite the same as those in the small general hospital, so that if we have anything to offer for the information of the one, the same would be true of the other.

We shall consider first the relation of the training school to the hospital. Quite a number of training schools are organized under a separate charter, and operated under a different board of directors, and kept in every way completely apart from the hospital, except that the pupils in the training school are employed by the hospital under certain conditions to nurse the patients. The Illinois Training School of Chicago is an independent institution. The student nurses get their practical training in the Cook County Hospital on the basis of affiliation. In this instance, the plan has proven a success. There are several training schools under university management. In these schools the practical training is given in the hospital, while the university controls the other educational details, and the university, not the hospital, authorizes the graduation and issues the diplomas.

Any connection, however, of a hospital training school with a university, inevitably leads to the addition to the training school curriculum of an increased amount of purely technical work. This presents a problem of far-reaching significance. It must be appreciated that in her future profession, the earning capacity of a nurse is limited, and the remuneration ordinarily received not very high. Too much technical information in the training school is therefore not warranted by the subsequent remuneration which is to be expected.

Many hospitals are getting away from the ten-hour day which used to be in vogue. Recent investigation regarding the effect of fatigue upon efficiency has shown that after a ten-hour day the efficiency of the worker greatly diminishes. It would seem best, therefore, to reduce the time on duty per day from ten to eight hours. If this were done, then a sufficient amount of time would be available for the increase in technical work which would be required by university affiliation. More time for the purely nursing part of the training could also be obtained by eliminating from the duties of the pupil nurse the ordinary housekeeping duties in connection with the wards. It has never seemed reasonable to expect pupil nurses to entirely assume all the housekeeping duties which usually are connected with hospital wards. These duties might better be undertaken by ward attendants or helpers who would receive adequate remuneration for the work they did. In this way the pupil nurses would be relieved of the monotony of doing certain tasks continuously throughout their training, which in reality have little or no bearing upon the actual teaching or learning of their profession. If such a procedure were adopted, more time would be available for the proper instruction in the actual principles and practices of nursing, and the pupil nurse would be in a more receptive mood for study.

Other changes in the curriculum of the training school might be considered. It must be appreciated that this is an age of specialization. The demand is becoming more and more acute, not for the nurse with general training, but for a nurse who is qualified along special lines. For instance, it is of no particular value to a surgeon that a nurse is a fairly capable general nurse. What he wants is a nurse who has special training in surgery. So too with the other specialists in medicine. According to the methods of training now in vogue, any specialist nurses are developed after they leave the training school from which they have been graduated. All their training, therefore, in their specialty is undertaken without supervision and at the expense of the practice of their profession. How much better it would be if the various training schools would undertake to give the course in the specialty either as a part of the undergraduate course, or as a distinct graduate school.

If the changes already suggested in relieving the pupil nurse of some of her arduous work were adopted, it would be possible to find time for a more or less intensive course in a number of specialties. It must be appreciated that more and more a new field of opportunity is opening not alone in the special branches of medicine, but in some of the more closely related sciences, especially those related to public health activities. It might be possible to give courses which would fairly well qualify nurses to act as assistants in the x-ray department of the hospital, in the hospital laboratory, in a training school administration, and in the social service department. In the majority of Canadian hospitals, the student nurse receives no training in the social service department. She gets her practical training in the wards of the institution, but has no actual knowledge of the conditions which have placed the ward patient in the hospital. Today all nursing work points towards educating the public to avoid causes of disease, rather than toward alleviating the suffering. This branch of the work should be given a place in the curriculum of our training schools. The nurses should be graded in the work, and an examination given. One worker in the social service department could give eight or ten lectures to the pupil nurse in her second year, and as well the pupil nurse could spend one or two weeks in the social service department visiting poor families, thus learning the causes responsible for sending the patients to the hospital. Other special branches demanding workers in their particular line are diseases of infants, infectious diseases, school nurses, visiting nurses, etc. It would seem that it might be possible to rearrange the work in the training school so as to allow the pupil nurses to elect any one of the special branches for the intensive

work in the last six months of their training. In this way, specialist nurses would be developed to meet the demand which is surely coming in a very urgent manner.

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A SURVEY OF THE NURSING QUESTION

An Eight-Hour Day, Cooperation of University and Training School and Affiliation of Smaller Schools with Greater, Ward Assistants, and Physical Examination of Nurses the Most-Needed Reforms

By M. T. MacEACHERN, M.D., C.M., Superintendent, Vancouver General Hospital, Vancouver, British Columbia

FOREWORD

The hospital administrator today finds that his management resolves itself very readily into the three main divisions, medical, nursing, and business. Although these divisions must have separate responsible heads with much different, and clearly defined, policies and activities, and though they can be discussed separately, yet there must be a very intimate connection existing between them in order to make a well-balanced, complete, and efficient management. The remarks, therefore, that follow are directed to the nursing phase of hospital administration, and though my remarks are based entirely on information gained from personal experience and study of the problem—partly from information gained elsewhere, but mostly from local conditions—and though geographical location finds us situated in the far West and in a young country where there are many new questions to solve, yet I hope the practical application of some of the thoughts contained therein may find place elsewhere, as it has in our institution.

INTRODUCTION

It is not wisdom for any superintendent of a hospital, other than a nurse herself, to say much about the nursing profession or venture suggestions or outline policies of development such as I propose doing in this paper. However, it has been my privilege as the administrative officer of a large institution to give this subject much consideration and deep thought, and this, let me say, has been of great pleasure to me as I have always been keenly interested in the nursing profession.

I believe that our hospitals are efficient only so far as our nursing and medical services are efficient. I do not think for one moment that the nursing profession is by any means perfect, but I must say that the advances made in recent years are marvelous; the great part played in the recent war has never been excelled, and I doubt if it ever can be in time to come. Still, there is constructive and reconstructive work to be done and the next few years undoubtedly will see many scientific advancements in the nursing service of our hospitals. In this paper, therefore, I desire to throw as much light as possible on some of the problems arising today which must be wisely solved if the right advancement is to be made.

Investigation of the entire question reveals a number of problems upon which we can well deliberate for a few minutes. The problems are, long hours of duty, need of higher education and broader training standards, shortage of nurses, and the physical health of nurses. The above conditions form a basis for this paper which I cannot deal with in full at the present time, so I intend to touch upon them, only. All these have been dealt with in full recently in my report to the board of directors of this hospital, and have since been acted upon in many instances.

From the above it readily appears that five great questions arise, and we will deal with them in this order: The eight-hour duty; the training school and the university; the postgraduate and affiliated courses; the ward assistant; and physical examination of nurses.

Before commencing the discussion of any of these I want to quote a paragraph from a paper entitled "The Modern Trained Nurse," given by Miss M. MacLeod, superintendent of nurses in this hospital, before the British Columbia Hospital Association Convention, which reads as follows:

"Many hospitals are getting away from the ten-hour day which used to be in vogue. Recent investigation regarding the effect of fatigue upon efficiency has shown that after an eight-hour day the efficiency of the worker greatly diminishes. It would seem best, therefore, to reduce the time on duty per day from ten, to eight hours. If this were done, then a sufficient amount of time would be left available for the increase in technical work which would be required by university affiliation. More time for the purely nursing part of the training could also be obtained by eliminating from the duties of the pupil nurse the ordinary housekeeping duties in connection with the wards. It has never seemed reasonable to expect pupil nurses to assume all the housekeeping duties which usually are connected with hospital wards. These duties might better be undertaken by ward attendants or helpers who would receive adequate remuneration for the work they did. In this way the pupil nurses would be relieved of the monotony of doing certain tasks continuously throughout their training, which in reality have little or no bearing upon the actual teaching or learning of their profession. If such a procedure were adopted, more time would be available for the proper instruction in the actual principles and practices of nursing, and the pupil nurse would be in a more receptive mood for study."

This paragraph has a great deal of bearing on much of the thought which I have tried to elaborate in the following pages, and indeed the whole paper from which the paragraph is taken is well worth your reading and consideration.

THE EIGHT-HOUR SYSTEM

The eight-hour duty system which is carried out in several hospitals today, first met with considerable opposition which readily fades away on consideration of the efficiency curve of the nurse and the work curve of the institution.

In regard to the first of these it is agreed that human efficiency wanes after an average of eight hours' continuous duty, and, from our own personal experience, there is no need of further argument regarding this. It is also agreed that resistance to disease drops with fatigue. This latter condition is, of course, a very serious one for a nurse, as her resistance to disease is her health asset. The former condition is very serious to the institution, which at all times needs efficient service.

Similarly, a study of the work curve of a hospital, as this is, so far as it affects the nursing side, indicates clearly that the "peak load" so to speak, is from 6:30 a. m. to possibly 2:00 p. m., when it gradually wanes till from 5:00 to 7:00 p. m., when there is a slight rise owing to so many cases coming in for operation next day. After this the load gradually drops till midnight, when it falls to its lowest and remains down till 6:30 a. m., or thereabouts, when the cycle commences again. The application of the eight-hour system seems to be more suitable therefore than any other system in such a case. If there are sufficient nurses a divisional basis of 50 per cent, 25 per cent, and 25 per cent of total number of nurses might be used, thus:

7:00 a. m. to 3:00 p. m. ..... 50 per cent
3:00 p. m. to 11:00 p. m. ..... 25 per cent
11:00 p. m. to 7:00 a. m. ..... 25 per cent

After conferring at length with our superintendent of nurses on several occasions and after a close study of local

conditions, we decided upon the following system as practical and efficient:

7:00 a. m. to 7:00 p. m. with four hours off daily, besides the usual half-day and Sunday hours.
3:00 p. m. to 11:00 p. m.
11:00 p. m. to 7:00 a. m.

This modification was made on account of the shortage of nurses and because we were very desirous of first improving the hours of night duty. We cover the entire nursing service with the same number as formerly. This scheme would have been introduced on October 1, last year, had it not been for the epidemic of influenza because of which it had to be deferred for a few months till all the nurses were back again and recovered from the effects of the epidemic. The arrangement naturally provides advantages on both sides—to the nurse and to the institution.

By this system the nurse has more time for recreation and study. Nurses coming on at 3 p. m. have had a night's sleep and almost an entire day off, whereas those who come on at 11 p. m. have had a very long evening to themselves. As to the effect on the health of our nurses, I can not make a definite statement, but I believe that we have had very little illness since the epidemic, which, of course, delayed the introduction of the system.

As to the advantage to the institution, I feel sure it produces a more efficient nursing service, and on the whole we are very pleased with it. During the coming year we hope to take a step further, inasmuch as we will endeavor to separate the lectures and demonstrations, as far as possible, from the duty hours. Possibly a six months' preliminary instruction period, both theoretical and practical, for all nurses coming in, will be introduced, by which a large number of the classes will be covered before the ward nursing service commences. This will be dealt with later in this paper.

THE TRAINING SCHOOL AND THE UNIVERSITY

The attention of leaders in the nursing profession is now directed to the linking up of the training schools with the higher education or bringing them closer to the universities. Towards this end we have taken a definite step here, and in dealing with this question in my recent report I was prompted by several motives: First, the recognition that the nursing service today is expected to enter much broader fields than formerly, such as public health, sociology, etc., and that more and more is demanded of nurses so that a broader education is needed; second, the wish to elevate the nursing profession to the highest possible plane by drawing our training schools closer to educational development and present-day advances; and third, the hope of establishing more readily leaders in the nursing profession.

When complete summary of the whole question had been made, it was then recommended to the University of British Columbia: First, that a college of nursing be established with a faculty; second, that a degree be granted on completion of the requirements to be laid down later; third, that through the college of nursing or department of nursing in the university, supervision be kept over our training, theoretical and practical.

After considerable negotiations with the education authorities of the university, and after they had given the matter due consideration with investigation of conditions elsewhere, they made the following recommendations: First, that a department of nursing be established under the faculty of science; second, that a degree be granted on the fulfillment of the following conditions—two years of arts or a preparatory course, and completion of three years' training in a recognized training school, the required standard of training schools to be laid down later.

It is further hoped that the directress of nursing of this hospital may be head of that department, if she is properly qualified, and that these required qualifications will guide us in our selection to fill the present vacancy. It is further desirable that all our nursing instruction be put, as much as possible, under the supervision of the department of nursing in the university. In due course there will therefore be two nurses, holding different standards, graduating from our hospital training school, yet both having the same practical training course. The first will hold a diploma from the hospital and a degree from the university which may be either "Bachelor of Nursing" or "Bachelor of Science of Nursing." The second will hold a diploma from the hospital only. The first will probably follow an institutional career or become a leader in her profession. Possibly she may take charge of a smaller training school or follow public health, social service, research, or other broader fields. The second will most likely follow the art of skilled nursing, an equally important post and one which today is demanding thoroughly well-trained nurses; that is to say—the young woman coming into this hospital to train, having two years' credits in arts or the equivalent, or higher, can secure the degree on completion of her practical training here, but the young woman coming in with less than this requirement will not get the degree but will secure exactly the same training for nursing as the other will get. The present-day requirements of this hospital for admission to the training course is three years' high school or the equivalent, and we trust that the day will soon come when we will demand the degree admission requirement to the course. Not only is it an advantage to the nurse herself to raise the standard, but it stimulates higher education, and, by this present university arrangement, high-school and normal-school girls who are not of age to come in to train can continue their studies in the university, preparatory to taking their course. The complete details of this new system are not yet fully worked out, but undoubtedly will all be completed by October.

In regard to the three years' training in the hospital—the first six months will be spent in intensive and concentrated instruction, both practical and theoretical teaching, the practical teaching will be carried on through demonstration and on the human subject, so that at the end of the first six months the nurse will be well equipped to assume ward duties and do her duty with a good knowledge of it.

For those desiring the degree, therefore, it will be seen that five years must be spent, and as mentioned before, many young women attending the high school can continue their studies direct into the university, making their education and training continuous. Two years' university or academic work will be equivalent to two years in arts, and it is planned that specially arranged courses may be had which will have a particularly beneficial bearing on the future technical education to be secured, thus a widened, sounder, and better foundation will be laid for the practical training to follow. Possibly such subjects as English, psychology, biology, chemistry, household economies, dietetics, etc., will be taught. This, therefore, is not only a great boon to the nursing profession but allows the university to extend its service in another direction and enter an extremely useful field. In addition, there is no doubt that this arrangement will have a stimulating effect on all our training schools in this province in making them adopt higher standards.

[To be continued]

OCCUPATIONAL THERAPY, VOCATIONAL RE-EDUCATION AND INDUSTRIAL REHABILITATION

Conducted by DOUGLAS C. McMURTRIE, *Director Red Cross Institute for Crippled and Disabled Men* and ELIZABETH G. UPHAM, *Advisor in Occupational Therapy, Milwaukee-Downer College.*

HOW THE DISABLED MAY WRITE QUICKLY AND WELL

A Number of Means of Writing Which Have Been Found Practical by Men With Disabled Arms—What Determination and a Right Method Can Do

By EMMANUEL CHASTAND, Director Municipal School of Crippled Soldiers, Nantes, France

In our hospitals I have often witnessed the touching sight of a young woman bending over the bed of a wounded soldier and writing at his dictation a letter to a mother, wife, or betrothed. The wounded man was certainly grateful to the nurse for her services; he was glad to be able to inform his beloved ones of his health; but how much happier he would have been, could he have written himself, and how much sweeter, tenderer, and more intimate would have been the letter!

One of the first desires of a soldier wounded in the arms or hands is to write home. He prefers to do it himself, even awkwardly, in pencil, so that he may express himself freely. Many men with a disabled right arm or hand have just for this purpose begun to train their left hand, and their progress with such an incentive has always been rapid. Not all succeed in writing perfectly, for there are certain principles to be observed in left-handed writing, but all are able to write legibly.

But beside these soldiers disabled in one arm or hand are those who have lost both hands or whose two arms are seriously crippled. These are among the most pitiable victims of the war; they will always be more or less dependent on others, whatever progress may be made in the invention of practical artificial arms. One of the first trials experienced by a man who has suffered an arm amputation is his discovery that he cannot smoke or write without the help of a nurse or comrade.

The object of this article is to describe some very simple devices by the aid of which men with amputated or injured arms or hands can learn to write quickly and well.

We must remember that the simplest appliance is always the best. Often we search long for a complicated device for some operation which could easily be performed by a much simpler method. Let me cite the case of a soldier with both hands amputated who during three months at a military hospital dictated all his letters. Three days after his admittance to the reeducational school at Nantes, he wrote with a pen his first letter to his mother, thanks to a simple rubber bracelet placed around his wrist.

The devices which enable a man to write vary with the nature of the injury. Here I should say that the disabled man should always practice with a pen. A pencil will be easy for him afterward, while the use of a pen causes difficulties when a man has learned with a pencil. The principle which is at the base of all intelligent prosthesis is that the instrument which the injured man is to use should always be as near as possible to the controlling stump. On the closeness of connection between the pen and stump often depend the facility and quality of the writing. Whenever possible, therefore, we must try to avoid intermediate, inert apparatus. If it is possible for the penholder to be manipulated by living muscles, no prosthetic appliance should be used.

Let us consider first the man whose only hand has lost the thumb. In his case the penholder must be held between two of the fingers, preferably between the first and second, or if these should be injured, between the second and third, or when necessary, between the third and fourth. In the case of a man who has lost all the fingers of his one hand, the thumb must be used; if there is only one remaining finger, that must be used. One can learn to write well most quickly with the index finger, then with the second, and then with the little finger. The third finger is the most rebellious, but in case of necessity it must be put to work.

In order to use one finger in writing, it is only necessary to attach a pen to it by a rubber ring about two centimeters wide. A long pen can be more securely fastened. If it is impossible to obtain a long pen, one may be lengthened by being inserted between the branches of a paper clip. The patient must be careful to place the point of the pen as near as possible to the end of the finger. The pen point and the finger should be in the same line. Then the man may go to work as if he were writing with the end of his finger on a board covered with dust; the pen will obey faithfully. He may, if he prefers, fasten a penholder to his finger in the same way, but I would advise him to cut it off so that the end of the handle fits in the joint of the second phalange. According to the kind of writing that he desires to do, the crippled man may give the pen point any angle he prefers.

We will now examine various cases of men who have lost both hands. Take the man with a double amputation at the wrist or perhaps one-third up his forearm. He tries at first to write by holding his penholder pressed between his two wrists. It is a bad method, for it necessitates the movement of the whole upper part of his body with every stroke, which prevents his acquiring any speed. A simple rubber band around the forearm will hold the penholder in an almost normal position and leave the second arm free to hold the sheet of paper in place. By this method a pupil in one of the higher commercial classes of the reeducational school at Nantes can easily take all the exercises in dictation. A man with no hands and only one arm may proceed in the same way and have his paper held by a paper weight. His copybook or paper must be placed before him in the proper position in order that his writing may have a normal appearance.

These are the more fortunate of the men with double arm amputations. For those whose arms have been taken off at the elbow or a little above, the problem is much more difficult and can only be solved by the exercise of all the wounded man's will power. Through determination men with only part of the upper arm left have succeeded in writing with a penholder attached to the stump. To do this they stand at a high table which comes almost under their armpits, so that the arm is horizontal and parallel with the table. It would be useless to claim that those whose injuries oblige them to write in this way succeed in writing perfectly and easily, but there are persons living so disabled who have important letters to write too private to be dictated, and I believe I have indicated a

method which may render them some service. Men with a stump less than two-thirds the length of the humerus or with no stump at all cannot by any effort learn to write.

If sometimes disabled soldiers, obliged to practice writing like children, become discouraged, let them think of the poor fellows who have only a short stump or whose arm has been disarticulated at the shoulder, and they will soon realize that their own is the more preferable lot.

* * * *

PHYSICAL RECONSTRUCTION IN A TUBERCULOSIS SANATORIUM

Occupational Work Is Primarily Curative—Has Demonstrated Its Success—An Effort Is Made To Link It Up with the Man's Old Job—Important in Keeping Up the Hospital's Morale

By PHILIP M. CONLEY, Second Lieutenant Sanitary Corps, Chief of Educational Service, United States Army General Hospital, No. 17, Markleton, Penn.

The work of physical reconstruction in tuberculosis hospitals is designed to be fundamentally a curative measure. Its object is to build up the body physically, afford informational subjects to occupy the minds of the patients, and at the same time give recreational facilities. Ward surgeons are required to prescribe one, two, three, or more hours a day of reconstruction work just as they prescribe medicine or anything else for the betterment of the patients. Prescriptions are made weekly so that, in case the patient is not doing well physically, he may be relieved of some of his work or his work may be entirely changed. In case the patient is doing well his work is increased.

All patients who are able to do reconstruction work in this hospital are quartered on two large wards. As soon as the patient is transferred to one of these wards, he is ordered to report to the reconstruction office. Here the psychologist makes a survey of his educational qualifications and of his previous occupation. He tactfully finds out what the man is capable of doing and what he hopes to do when he is discharged from the hospital. When we have this information at hand, the patient is assigned to certain classes which will be of benefit to him when his disease is arrested. We attempt always to have the man select his own course of study. He is made to feel that everything planned for him will assist in his cure and will also be of value to him when placed upon his own resources.

The course of study is arranged with the idea in view of aiding men in occupations which will not interfere with their physical condition. The course of study is as follows:

Commercial Department.—Bookkeeping, cost accounting, typewriting, shorthand, business English and correspondence, business law, and multigraphing.

Auto Mechanics Course.—General repairing, roadside repairing, driving, vulcanizing and acetylene welding.

Woodworking.—Carpentry, cabinet making, and repair work.

Common School Work.—English, (including reading), penmanship, arithmetic, and spelling.

Printing and Publishing.—Typesetting, proof reading, press feeding, editorial writing, and reporting.

Drawing.—Mechanical drawing, free hand drawing, and cartooning.

Telegraphy.

We have a long list of occupations which Capt. Joseph Walsh, our commanding officer, who is an international authority on tuberculosis, has approved as being suitable for men who have arrested cases of tuberculosis. While we do not have facilities or instructors enough to give training in these varied occupations, the subjects we have chosen are related to a great number of them. Our most popular subjects are auto mechanics and commercial work. We feel that, regardless of a man's occupation in life, he should be able to use a typewriter and also be able to handle an automobile.

We have a plan whereby a patient may enter any class whenever he is physically able without interfering in the least with our regular program. We may use our auto mechanics class as an illustration. Our mechanic has arranged a series of lessons, twelve in number. If a patient is assigned to this department today, he may be compelled to begin studying the ignition system. The instructor continues his work without explaining what has gone before. The patient is then given all of the twelve lessons until he comes back to ignition. In the meantime other patients have been added to the class at various times. They in turn continue class work until they have completed their course. For those who complete the course and want to continue the study, we have an advanced course.

In all our courses, we aim to give the men practical advice about the kind of work they should do when they are discharged from the hospital. We rarely aim to retrain a man absolutely. He usually has done work of some kind; if it is not remunerative enough or if it is too strenuous for him to return to, he may select a relative subject. It is, of course, discouraging to a man to tell him that he must begin training for an entirely new job.

The tuberculous soldier must go back into civil life with a worse handicap than any other class of disabled soldiers with the exception of the blind. He must compete with able-bodied men. His condition is not obvious; he receives no sympathy because to all outward appearances he is sound and well. The average tuberculous man feels that he is perfectly capable of doing anything that he has ever done before, and, if he takes the proper personal care of himself, there is no reason why his case should again become active.

The physicians in the hospital keep close watch on their patients to see that they do not overwork. This is especially true when the men are first assigned to a certain department. Owing to the period of the tuberculosis patient's inactivity, and also owing to the fact that his disease acts as a stimulant to work, he is liable to work too much if permitted free rein. For this reason his weight is carefully watched, his temperature observed regularly, and his general reaction noted.

When a patient is assigned to do reconstruction work, the psychological effect is decidedly beneficial. He is made to feel that he is improving and that it will not be long until he is cured. His optimism is very apparent. It gives him a new lease on life to realize that he can actually do things again. For this reason we arrange to start him on something that he can do with his hands. His creative instinct acts as an incentive when he sees work being accomplished.

In addition to our regular vocational class work, we have the men take therapeutic exercises. The setting-up exercises harden their muscles, give them a good appetite, and improve their physical condition. With this treatment the patients are not so restless and dissatisfied, their food tastes better, and, of course, it is more easily digested.

We also have supervision of all entertainments and recreation for patients. This includes picture shows, quiet games, furnishing of books and magazines, and

Fig. 1. In typewriting even the bed patients find a profitable and interesting occupation.

various entertainment features. These activities tend to keep the patients more contented and happy.

One of the most important results from reconstruction work is the fact that patients are hardened so that when they return to civil life they may begin work at once without disastrous results. After spending several months in a hospital the man becomes flabby, his muscles are inactive, and his entire physical condition is hospitalized. If he is given graduated physical exercises, doing things that are not monotonous but of real interest, under supervision of his physician, he goes out of the hospital with confidence in himself. One physician said: "To discharge a tuberculous patient without systematic exercise would be analogous to sending a man out immediately after splints had been removed from a broken leg."

There has been considerable argument concerning reconstruction work for tuberculous patients. One theory is that patients should be given absolute rest. After nearly a year's experience at this sanatorium in which 429 patients have been treated, the entire group of medical men favor our work. Before this article was prepared, a meeting of all of the ward surgeons of this hospital was held and the subject was discussed at length. They were unanimous in their approval; they gave not a passive acceptance but an emphatic statement that the work has proved a source of real benefit to the patients.

Fig. 2. "Tinkering with an automobile," a congenial occupation for any man, becomes a means of future livelihood.

Physical reconstruction in a tuberculosis sanatorium is of value, not only in the training of the patients, but also in keeping up the morale of the institution. Owing to the fact that men are required to spend from three to nine months in the hospital, they tend to become restless, dissatisfied, and often complain and find fault with everything. When they are given something to occupy their minds, and at the same time made to realize that they are preparing themselves for a better occupation when they return to civil life, they become more contented and satisfied with the institution.

Reconstruction work has been made possible by the energy and efficiency of men like Col. Frank Billings, head of all reconstruction work in military hospitals, Col. George Bushnell, retired, head of military tuberculosis hospitals, and Col. Roger Brooke, Jr., present head of military tuberculosis hospitals, and the stamp of men found generally throughout the Surgeon-General's Office.

I have attempted to make the following points: 1. Physical reconstruction work is primarily curative. 2. The patients are put into classes that will benefit them in after

Fig. 3. Woodworking is among the best of therapeutic activities, as it satisfies the creative instinct and occupies the hands.

life. These classes are selected because of their adaptability to the condition of tuberculosis patients. 3. Patients are carefully watched so that they will not overwork. 4. Exercises are given which will harden the men for active work when they are released. 5. The work and exercises have a tendency to keep up the morale of the institution.

* * * *

ELECTRICIANS IN DEMAND

Interesting Electrical Jobs Suitable for Men with Various Disabilities—Federal Board Offers Training

A returned soldier, whatever his disability and whether or not he has had previous experience, will find some job that will be suitable for him if he is at all interested in the subject of electricity, so great is the present demand for electrical men. It is not surprising that courses in electricity, either in construction, maintenance, or repair, are popular with disabled soldiers. There are at present 178 men taking courses in the general subject of electricity; thirteen are studying bench work and sixty-one are preparing to be electrical engineers.

Disabled men can fill many positions in power plants, such as switchboard operators, substation operators, combustion experts, attendants of auxiliary machinery. Clerks whose duty it is to analyze and record the daily operating charts and compile them into cost records, are being used more and more in electrical plants.

LETTERS TO THE EDITOR

Miami City Hospital Meets Climate's Needs

To the Editor of THE MODERN HOSPITAL:

In view of the fact that Miami possesses climate and environment of unusual healthfulness, it seems almost superfluous to speak of a hospital in connection with this great winter resort.

Ills that human flesh is heir to, however, are not always respecters of even the most favorable outward conditions, and to provide for such ills the city of Miami has built a thoroughly modern hospital, furnished it carefully for present needs, and made adequate provision for expansion in the future.

The hospital is built on the unit plan, designed with special attention to the subtropical climate. This means an unusual number of windows and sun porches so that the convalescent may obtain the benefit of the balmy, pure breezes from the Gulf Stream.

The administration and service buildings, together with two ward buildings, have been completed. These are all fireproof, the construction being steel and concrete. Operating rooms, two colored wards (colored patients are segregated), laundry and night nurses' dormitory are temporary structures built of wood, but when the entire plans are carried out these, too, will be of steel and concrete, and fireproof. There will also be separate wards for contagious and epidemic diseases.

There are seventy-five beds in the hospital, providing for both private and charity patients. The operating rooms, the delivery room, and all necessary equipment of the up-to-date institution are ready for any emergency. There is a special operating room for eye-ear-nose-and-throat work. The main kitchen is large and installed with all modern appurtenances, and the diet kitchens are furnished with the best of everything. To date $150,000.00 has been spent on equipment and buildings.

In 1918 a nurses' training school was incorporated. There are at present ten student nurses; these, with four graduate nurses, are able to take charge of the general work. Private duty nurses are called in when necessary.

The city has been most fortunate in securing as superintendent Dr. J. L. North, who as a general practitioner and a specialist in x-ray work, stands well to the front. He has a complete electrical equipment which he frequently uses for the hospital work.

Other prominent physicians and surgeons place their services unreservedly at the disposal of the hospital.

A site in the suburbs of Miami, high and well-drained, with piney woods close by, was well chosen by the city for the location of its hospital. The institution has its own vegetable gardens, dairy, and chicken run.

During the influenza epidemic in October, 150 patients were in the hospital at one time. The nursing staff, with nurses called from the city, did valiant duty, with the result that the number of fatalities was exceedingly low. Eventually every nurse but one was stricken, and the nurses' places were filled by volunteers, many of these being prominent workers (men and women) from the city.

LILLAH B. HARLEY, R.N.
Matron Miami City Hospital, Miami, Fla.

Situated on the high pine lands of Florida, the Miami City Hospital has an ideal location.

A Woman Medical Student in the Far East

To the Editor of THE MODERN HOSPITAL:

I am sending this broken sentence to you. Please excuse me. I can not write English well. I am one of the Korean girls in the Medical School for Women at Tokyo, Japan. My name is Duk Syn Hyun. I know well Dr. Rosetta S. Hall and she helped me for all my future work so I always remember her. [An article by Dr. Hall on the excellent work that is being done in the Hospital of Extended Grace to Women and Children, Pyeng Yang, Korea, appeared in THE MODERN HOSPITAL, October, 1918.] I am a third class now. I do not know what we shall do for Korea; my duty is too heavy, so I study hard always for my poor country.

Students of the Medical School for Women, Tokyo, Japan.

DUK SYN HYUN,
Medical School for Women, Tokyo, Japan.

Alice Fitzgerald Represents American Nurses in Europe

To the Editor of THE MODERN HOSPITAL:

Miss Alice Fitzgerald, who has just been appointed as chief nurse for the American Red Cross Commission in Europe, is a Johns Hopkins graduate and was formerly superintendent of nurses at the Robert W. Long Memorial Hospital in Indianapolis, Ind., and superintendent of the Wilkes-Barre City Hospital, Wilkes-Barre, Pa. Miss Fitzgerald went from Massachusetts to England as the Edith Cavell Memorial Nurse. She served with the British in the line hospitals which were often under constant fire of the enemy and was decorated by King George with the Royal Red Cross of Great Britain.

When the United States entered the war, Miss Fitz-

gerald asked for a transfer to the American Red Cross and was sent to organize a hospital in Rimini, Italy, for the Venetian refugees. For her good work there and also for service given in the Messina disaster, she was decorated with the Italian order of the Red Cross.

Early in 1918 Miss Fitzgerald returned to Paris and was made the chief nurse of the Service de Santé, that service which did such heroic work in caring for American wounded in French line hospitals[1]; she has remained chief of this service until her recent appointment and has continued the work of placing American nurses in hospitals and port infirmaries in France and wherever American soldiers needed comfort or care that did not come directly under army medical service.

Miss Fitzgerald speaks both Italian and French well and is thoroughly familiar with European hospital and nursing problems. She possesses a charming personality, infinite tact, and a broad vision. She is an ideal woman to represent the nurses of the United States in the work of reconstruction in Europe.

MARGARET J. ROBINSON, R.N.
With the American Red Cross, Paris.

ANALYSIS OF DISABILITIES

Figures of War Risk Insurance Bureau Reveal Interesting Data Concerning Disabled

The figures shown in a report on 52,790 claim cases reported by the War Risk Insurance Bureau to the Federal Board for Vocational Education for the period ending April 30, give a fairly accurate indication of the general run of disabilities suffered by the men in the United States, army, navy, and marine corps.

Of eyesight cases there have been 2090, being 4 percent of the whole; of wounds and injuries to leg necessitating amputation, 746 cases, or 1.4 percent of the whole; wound to arms necessitating amputation, 1868 or 3.6 percent of the whole; wounds and injuries to legs not necessitating amputation, 8497 or 16 percent; wounds and injuries to arms not necessitating amputation 3637 or 6.9 percent; wounds and injuries to hands not necessitating amputation, 1961 or 3.7 percent; wounds and injuries to head, 576 or 1.1 percent; hernia, 757 or 1.4 percent; miscellaneous wounds and injuries, 3249 or 6.2 percent; chest complaints and tuberculosis of the lungs, 10,332 or 19.6 percent; tuberculosis of the bone, 377 or 0.8 percent; rheumatism, 1022 or 1.9 percent; heart disease, 3780 or 7.2 percent; epilepsy, 312 or 0.5 percent; nervous diseases, shell-shock, etc., 1919 or 3.7 percent; insanity, 1589 or 3 percent; deafness, 1280 or 2.4 percent; frostbite, totaling amputation of feet, 25; miscellaneous diseases, 3873 or 7.3 percent; not stated 4900 or 9.3 percent.

The "War Beetle" Bed at Belfast

The men employed at Messrs. Workman, Clark & Co.'s shipyard at Belfast completed the *War Beetle*, a standard ship, in 3¾ days from the time of its launch, according to an account in *The Hospital*. The firm was anxious that this smart piece of work should be fittingly acknowledged and asked the men what form it should take. Their appreciation of the Royal Victoria Hospital decided the men to refuse personal gifts and to suggest the endowment of a bed at that institution. The firm have therefore sent a cheque for £250 to endow a bed at the hospital for five years in the name of the foremen, leading hands, and workmen engaged on the *War Beetle*.

[1] See article appearing on page 34 of this issue of THE MODERN HOSPITAL.

QUERIES AND ANSWERS

Cross-Plan in Hospital Building

We are contemplating the building of a fair-sized hospital to serve a rather extensive community, and opinion at present inclines toward a cross-plan in building. Perhaps you will advise us on the advantages and disadvantages of this style of architecture.

SMALL-TOWN ARCHITECT.

Experience of a number of new hospitals seems to have shown that the cross-plan of hospital building works very well providing the wings do not project too far and the corridors are not too long. The principal advantage of a building of this kind is that the center of activity is in the center of the hospital. Another advantage is that the patients get better light, as all rooms get sunshine some time during the day, regardless of the way the building faces.

Wall Decorations for Mental Patients

To the Editor of THE MODERN HOSPITAL:

I am very anxious to secure some information regarding color schemes which may be used in decorating a hospital ward for nervous and mental patients.

The ward in question has a corridor about 150 feet long and 12 feet wide, with thirty side rooms opening on the corridor; at either end of the corridor are the day halls.

It was my idea in redecorating the side rooms, we could work out a color scheme which would be of benefit to the class of patients who come to us for treatment.

SUPERINTENDENT OF STATE HOSPITAL FOR THE INSANE.

This very interesting inquiry was referred for answer to Dr. William A. White, superintendent of St. Elizabeth's Hospital, Washington, D. C., who replied as follows:

"In general, I should say that it is better to adhere to neutral pastel tints, and, so far as the effect on the patient is concerned, it would be better to have these tints dull rather than glossy, although the glossy type of paint is naturally much more easily cleaned.

"With regard to the choice of colors, the question is a very difficult one, and I do not believe that we are as yet on sufficiently firm scientific foundations to offer anything very definite. The meaning of colors is a very complicated matter, and, whereas colors have a general symbolism, which is more or less accepted, such as green for safety and red for danger, with the various ramifications of these meanings, still, in individual cases, the color may mean something entirely different to the patient, and so it is exceedingly difficult, if not impossible, to formulate, at this time at least, general principles.

"The lighting effects of the ward should, I believe, be along modern lines, the tendency of which is to do away with numerous bright points of light that are within the range of vision; wards are lighted by reflected light, which produces a general glow and is not tiring to the eye.

"If you are interested in the symbolism of colors, I would refer you to an article by Dr. Evarts in the *Psychoanalytic Review*, for April, 1919, which discusses this subject at considerable length. The article shows what a complicated problem the whole matter is."

BULLETIN OF THE AMERICAN HOSPITAL ASSOCIATION

Offices:
728 Seventeenth Street, Washington, D. C.
308 Anisfield Building, Cleveland, Ohio
Monthly Bulletin issued by the Executive Secretary
308 Anisfield Building, Cleveland, Ohio
HOWELL WRIGHT Executive Secretary

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Institutional Membership

One hundred and sixteen institutional members have been admitted to the association and have received their membership certificates. In addition, applications have been received from the following hospitals:

Mercy Hospital	Chicago
Lubbock Sanitarium	Lubbock, Tex.
Painesville Hospital	Painesville, Ohio
Warren City Hospital	Warren, Ohio
Faulkner Hospital	Boston
Henry Heywood Hospital	Gardner, Mass.
City Hospital	Columbus, Ga.
Edgecombe General Hospital	Tarboro, N. C.
Presbyterian Hospital	Chicago

Seven hundred other hospitals are represented in the association indirectly through associate or active membership. A campaign will be commenced shortly to increase the number of institutional members.

RETENTION OF ACTIVE AND ASSOCIATE MEMBERSHIPS

The records of the association give the following data in regard to associate and active membership:

	Active	Associate
Persons whose dues are paid up until 1919	684	181
Delinquent for one year	146	44
Delinquent for more than one year	265	109

The following communication has been sent to the first two groups:

"Annual dues for 1919 for active and associate membership in the American Hospital Association are now due. Please make checks payable to Asa S. Bacon, treasurer, and mail them to 308 Anisfield Building, Cleveland.

"Active membership $5, associate membership $2. On receipt of dues, a 1919 personal membership card will be mailed to the active and associate members respectively.

"Active and associate members are urged to maintain their personal memberships in the association even though they may be appointed as *voting delegates* to represent *institutional members*. This is not necessary and the institutional members are in no way obligated to appoint those holding personal memberships in the association as their representatives but the retention of present active and associate memberships, held by voting delegates representing institutional members, has this advantage—it insures continual membership in the association.

"Persons now holding active or associate membership in the association and others eligible to either may, under the constitution, be appointed voting delegates to represent the institutional members. They will have but one vote—namely, as representative of the institutional member. Each institutional member will designate its voting delegates each year and the standing of such delegates in the association ends with each year for which they are thus appointed. Past connections with the association in this capacity does not entitle one to active or associate membership later.

"*Active and associate memberships in the association do not terminate with the severance of hospital connections. Such memberships once established continue as long as annual dues are paid.*

"As with other similar organizations, all dues of active or associate members in the association, who have been in the service of the army and navy during the war, will be remitted. Since the association has an incomplete record of such active service, members who have been in the service or are still in the service, are requested to so notify the office upon receipt of this notice."

> Has your hospital applied for institutional membership in the American Hospital Association? The organized assistance of American hospitals in the solution of public health problems was never needed so much as now. Institutional membership in the American Hospital Association benefits both the individual hospitals and the public health. For information write the secretary.

The Association Acts as the Agent of the American Red Cross in Distributing Dressing Gauze Without Compensation

As authorized by the board of trustees at the last meeting, the American Hospital Association is acting as agent in distributing a large amount of dressing gauze which has been given to the hospitals of the country by the American Red Cross. Dr. John A. Hornsby, Munsey Building, Washington, has been appointed special secretary and represents the association in the matter. He has sent to three thousand hospitals the following communication, which fully explains the plan of distribution:

"The American Red Cross has given to the hospitals of the country through the American Hospital Association a large amount of dressing gauze without compensation. Approximately half of this is to be distributed within one month and the remaining half July 1, 1920. The reason for the delayed shipments is that the amount is so large that it is feared the distribution of all at this time would cripple the gauze industry too seriously. The gift is subject to the following conditions:

"1. Transportation from the Red Cross storehouses to the hospital is to be paid by the hospital receiving the gauze. (The gauze is stored in various parts of the country, so these charges will not be excessive.)

"2. Distribution is to be made in proportion to the philanthropic work of the hospital and to be based on both free and part-pay service.

"3. The hospital receiving this gauze, is, as far as is possible and proper in carrying on the philanthropic work of the community, to give preference to soldiers, sailors, and their families to the extent of the full value of the gauze received and, as far as is feasible and practical, to do this in cooperation with the local Red Cross officials.

"In order to make the allotments of gauze on this basis, it is necessary for the American Hospital Association to have the information indicated on the accompanying sheet."

The sheet accompanying the communication asks for information on which to base the allotment of gauze. The hospitals are asked to state whether their organization is United States, state, municipal, private corporation for profit, private corporation not for profit, maintained by church or maintained by any other organizations. They are also required to give the number of beds; the days of treatment given, the per diem cost, and the total cost for free, part-pay, and pay patients, the total cost of operation of the hospital and dispensary for the last fiscal year; the total receipts from operation (from patients, etc.); the operating deficit; and the means by

which this deficit was made up, whether by endowments, subscriptions, etc. They were asked also if they renovated their dressing gauze for re-use.

1918 Proceedings

Page proofs of the 1918 proceedings have been read and the complete copies will be distributed at the earliest possible moment. One copy will be mailed from Chicago to each of the life members and to each active and associate member whose 1918 dues are paid. Three copies will be sent to each institutional member. The publication has been carefully edited and certain irrelevant and immaterial matter eliminated.

1919 Convention

HOTEL RESERVATION

Have you made your hotel reservations? The Hotel Gibson will be the headquarters, where the majority of the section meetings will be held, but a number will be held at the Hotel Sinton, across the street. The dates of the convention are September 8, 9, 10, 11, 12, 1919.

Other hotels and rates are given below. See map for location. (Rates for Hotel Gibson and Hotel Sinton were published in the May and June bulletins.)

Hotel Alms, McMillan and Alms Place, American plan, 150 rooms—
- Single room without bath $3.00
- Single room with bath 4.00
- Double room without bath 6.00
- Double room with bath 7.00

Dennison Hotel, Fifth and Main, 186 rooms—
- Single room without bath ..... $ .75 and $1.50
- Single room with bath ..... 1.50 and 2.00
- Double room without bath ..... 1.50 and 2.00
- Double room with bath ..... 2.00 and 2.50

Emery Hotel, 150 rooms—
- Single room without bath $1.00
- Double room without bath 2.00
- Single room with bath 2.00
- Double room with bath 3.50

Grand Hotel, 260 rooms
- Single room without bath ..... $1.00 to $2.00
- Double room without bath ..... 2.00 to 3.00
- Single room with bath ..... 2.00 to 3.00
- Double room with bath ..... 3.50 to 4.00

Havlin Hotel, 190 rooms—
- Single room without bath $1.50
- Double room without bath ..... $3.00 to 4.00
- Single room with bath ..... 2.50 to 6.00
- Double room with bath ..... 4.00 to 7.00

Hotel Metropole, 175 rooms—
- Single room without bath ..... $1.50 to $2.00
- Double room without bath ..... 2.50 to 3.00
- Single room with bath 2.50
- Double room with bath 3.50

Oxford Hotel, 78 rooms—
- Rooms ..... $ .50 to $1.25

Palace Hotel, 250 rooms—
- Rooms without bath per person ..... $1.00 to $1.50
- Rooms with bath per person ..... 1.50 to 2.00

Princeton Hotel, 103 rooms—
- Single room ..... $ .75 to $1.50
- Double room ..... 1.00 to 2.50
- (No extra charge for bath)

Hotel Rand, 150 rooms—
- Single room without bath ..... $ .50 and $1.00
- Double room without bath ..... 1.00 and 1.50
- (Free use of shower and tub baths)
- Single room with bath ..... 1.50 and 2.00
- Double room with bath ..... 2.00 and 3.00

Hotel Savoy, 90 rooms—
- Single room without bath $1.25
- Double room without bath ..... 2.50 up
- (Free use of shower and tub baths)
- Single room with bath ..... 2.00 to 2.50
- Double room with bath 3.00

Stag Hotel, 95 rooms—
- Rooms ..... $ .50 to $1.25
- (No extra charge for shower or tub baths)

SKELETON PROGRAM

The program of papers and discussions is now being arranged by the president, and it is expected that a rather complete program will be ready for publication in the August bulletin. The final program will appear in the pre-convention number.

A large part of the program will be devoted to the all-important subject, "hospital standardization." There will be a joint session of the American Hospital Association and the American Hospital Conference, newly organized as the American Conference on Hospitals (see May number of THE MODERN HOSPITAL, page 360). The American Dietetic Association again meets with the association, and there will be one joint session of these two organizations.

Experience at Atlantic City prompted the suggestion that each section be limited to one general meeting, unless some special reason makes more than one meeting necessary. The president has written the sectional chairmen to arrange their programs at once. So far as possible, all papers will be limited to twenty minutes, and not more than two papers will be read at a given general session. Every effort is being made to promote discussion. Persons will be assigned in advance to open discussion of papers. Special attention will be given to round-table meetings. The president will, on request, make special arrangements for such meetings.

One of the most successful sessions at Atlantic City was an informal meeting of hospital superintendents under the leadership of Mr. Asa Bacon, who has been appointed by the president to preside at a similar meeting this year, which has been tentatively arranged for Thursday, September 11, at 3 p. m., at the University of Cincinnati Medical School. A communication asking for suggested subjects for discussion is being sent to institutional members and others. Prompt replies should be made to Mr. Asa Bacon, superintendent of the Presbyterian Hospital, Chicago. The communication reads as follows:

"A special round-table meeting of hospital superintendents and others is to be an important part of the program of the Twenty-first Annual Convention of the American Hospital Association, Cincinnati, September 8, 9, 10, 11, 12. The date tentatively set for this meeting is September 11, 3 p. m., at the University of Cincinnati Medical School. No papers will be read. The meeting is intended to afford an opportunity for the discussion of everyday hospital problems confronting superintendents and their assistants. The plan of discussion will be similar to that of the meeting held at Atlantic City. The chairman desires suggested topics for consideration at this meeting. Will you kindly make your suggestions on the enclosed postal card and return at once? Every effort is being made to make this session a lively and profitable one and your cooperation is solicited."

It is expected that social and health insurance will be given an important place on the program. Arrangements are being made for a stenographic report of every general session and section meeting. A contract is being considered which, if entered into, should result in the publication of the proceedings within sixty days after adjournment of the convention.

LOCAL COMMITTEE

The association is fortunate in its convention city and particularly in its local committee of one hundred members. The chairman of the active executive committee is Maj. C. R. Holmes, of splendid reputation in medical and hospital fields in this country. Other members of the committee are: Rev. A. G. Lohmann, vice chairman, superintendent Deaconess Hospital, Cincinnati; Dr. Walter E. List, superintendent Cincinnati General Hospital; Mr. Walter J. Friedlander, president Hisey-Wolf Machine Company; and Mr. Robert Crane, R. G. Dun Company. The secretary is Mr. Thomas Quinlan, who is secretary of the local convention board. All work of the local committee is centered in the office of the Chamber of Commerce.

Careful arrangements are being made for the care and comfort and entertainment of convention delegates and guests. Cincinnati hotels are actuated at all times by the "come-again" spirit and seek to treat their guests accordingly. The local committee is arranging for a special reception and entertainment on Monday and Tuesday

evenings. Perhaps the most important entertainment feature of the convention will be the visit to the University of Cincinnati Medical School and the Cincinnati General Hospital. Cincinnati hospitals will maintain open house throughout the convention. The August and pre-convention bulletins will contain complete information.

Literature regarding the hotels and about Cincinnati in general will be mailed direct to members of the association. It is expected that many hospital people living within reasonable distance of Cincinnati will wish to make the trip by automobile. Road maps and travel literature will accordingly be mailed. Arrangements are being made

Map of the City of Cincinnati.

Depots

	No.
Central Union Depot	1
C. H. & D. Depot	2
Court Street Depot	4
Fourth Street Depot	22
Pennsylvania Depot	3

Hotels

	No.
Alms Hotel	17
Dennison Hotel	16
Grand Hotel	13
Havlin Hotel	9
Honing Hotel	41
Hotel Emery	8
Hotel Gibson (Headquarters)	6
Hotel Sinton	5
Lackman Hotel	7
Metropole Hotel	12
Oxford Hotel	39
Palace Hotel	10
Princeton Hotel	38
Rand Hotel	37
Savoy Hotel	11
Stag Hotel	14

Schools, Colleges, Etc.

	No.
Art Museum and Art School	35
College of Music	46
Conservatory of Music	47
Guilford School	36
Hebrew Union College	33
Hughes High School	31
Lane Seminary	45
Ohio Mechanics Institute (Emery Auditorium)	29
St. Xavier's College	48
University of Cincinnati	32
Woodward High School	30

Other Points of Interest

	No.
Business Men's Club	49
Cincinnati Baseball Park (Redland Field)	51
City Hall	23
Court House	24
Coney Island Landing	44
Hamilton County Memorial Hall	28
Music Hall	27
New Y. M. C. A.	25
Old Hospital	26
Post Office	20
Public Library	19
Rookwood Pottery	34
Sterling Glass Works	50

for central garage accommodations for these automobile parties.

MEETING OF DELEGATES APPOINTED BY THE GOVERNORS

The governors will be again requested to appoint delegates to the convention and to provide them with credentials of appointment. There will be special registration of such delegates and a special meeting has been tentatively arranged for Wednesday evening, September 10, at 8 p. m. It has been suggested that the meeting be devoted to consideration of special state hospital problems, including legislation and organization of state hospitals for collective action. The list of state delegates so appointed will be published.

NON-COMMERCIAL EXHIBIT

The non-commercial exhibit will be arranged under the direction of the local committee. Miss Alice Thatcher, superintendent of Christ Hospital, Cincinnati, has been appointed chairman of this committee. Other members will be appointed later. The exhibit will be arranged on the mezzanine floor, Hotel Gibson. A bulletin will be mailed shortly to institutional members and others, asking assistance and cooperation in this exhibit. Originality and quality is desired in the exhibit rather than quantity. The following suggestions have been made: (1) hospital pictures of interest showing both exterior and interior of hospital; (2) interesting reports and hospital forms and records; (3) new or original hospital devices or apparatus; (4) economies promoted; (5) exhibits of forms, reprints, and other literature; (exhibits of hospital dolls, models, and nurses' uniforms are not desired).

Hospitals desiring to exhibit should communicate with the chairman of the committee.

SPECIAL EXHIBITS FOR ARCHITECTS

A special exhibit of hospital plans, blue prints, pictures, sketches, and models is being arranged in cooperation with the section on hospital construction. Dr. John A. Hornsby, special secretary, will have general supervision and direction of the exhibit. It is expected that there will be a revival of hospital building and such an exhibit will be of great value to the members of the association. The war has given us its lessons in hospital construction and it is hoped that there will be exhibits of war-time hospitals. Special talks on hospital construction will be given by Dr. Hornsby. A special bulletin on this subject will be sent out to architects and others shortly.

COMMERCIAL EXHIBIT

The commercial exhibit promises well. Only a few spaces remain unsold in Diagram B but there are still a number of spaces unsold in Diagram A. (See May bulletin). The program is being arranged with a view to giving more time for inspection of these exhibits. One evening has been set aside definitely for this purpose.

SKELETON PROGRAM

Monday, September 8, 1919.
3 p. m.: Registration.
Evening: Informal gathering, music, inspection of exhibits.

Tuesday, September 9, 1919.
10 a. m.: General session: Formal opening of the convention, Maj. C. R. Holmes, chairman of the local committee, presiding. 1. Address of welcome, Mayor of Cincinnati. 2. Address, Governor of Ohio. 3. President's address, Dr. A. R. Warner, president.
2 p. m.: Section meetings:
1. Section on out-patient work.
2. Section on hospital construction.
3. Section on nursing.
4. Section on dietetics (American Dietetic Association).
8 p. m.: Reception and inspection of exhibits.

Wednesday, September 10, 1919.
10 a. m.: Joint general session: American Hospital Association and American Conference on Hospitals on hospital standardization.
2 p. m.: Joint general session: American Hospital Association and American Conference on Hospitals.
8 p. m.: Special meeting for state delegates appointed by the governors.

Thursday, September 11, 1919.
Morning: Visit to Cincinnati General Hospital and University of Cincinnati Medical School. Section meetings at the medical school and hospital.
1. Section on social service.
2. Section on dietetics (American Dietetic Association).
3. Section on hospital administration.
3 p. m.: Special round-table meeting under the direction of Mr. Asa S. Bacon, presiding.

Friday, September 12, 1919.
10 a. m.: Joint general session: American Hospital Association and American Dietetic Association.
2 p. m.: General session:
1. Reports of committees.
2. Election of officers.
3. Other business of the association.
Evening: General session: Adjournment dinner with special program of speakers.

PUBLIC HEALTH NURSES TO BE FURNISHED BY RED CROSS

New Relation between Red Cross and Public Health Service Incident to Development of Latter Organization

The American Red Cross, through its Department of Nursing, has entered into an arrangement with the United States Public Health Service whereby graduate enrolled Red Cross nurses will be furnished to the Public Health Service just as Red Cross nurses are supplied to the army and the navy.

This new relation between the Red Cross and the Public Health Service is an incident in the development of the latter organization under a recent act of Congress which is designed in part to meet the growing hospital needs of the enlarged merchant marine. Under this law additional hospital and sanatorium facilities for the care and treatment of discharged and disabled soldiers, sailors, and marines are to be obtained. Not only actual fighting men will be protected by the act, however, but also army and navy nurses, patients of the War Risk Insurance Bureau, merchant marine seamen, seamen on boats of the Mississippi River Commission, officers and enlisted men of the United States Coast Guard, officers and employees of the Public Health Service, certain keepers and assistant keepers of the U. S. Lighthouse Service, seamen of the Engineer Corps of the army, and civilian employees included under the United States Employees' Compensation Act.

In the expectation that the number of patients to be cared for in hospitals of the Public Health Service will consequently be increased by fully 25,000 a year, Surgeon-General Rupert Blue turned to the Red Cross as a source of enlargement for the Public Health Nurse Corps. At present there are approximately ninety nurses employed in this service, but with the cooperation of the Red Cross it is planned to increase the number to at least seven hundred fifty.

Miss Lucy Minnegerode of Fairfax, Va., has been appointed superintendent of the United States Public Health Nurse Corps by Surgeon-General Blue. Her appointment follows closely on a tour of marine hospitals which she made for the Surgeon-General to canvass nursing needs.

"Made in Germany"—Not Wanted

There is a soldier at Walter Reed Hospital in Washington who certainly is supporting the boycott of German goods. When he came out of the ether the other day he found a good-sized bit of shrapnel tied to a button of his pajama coat.

"What's this?" he asked in a puzzled way.

"We thought you might like it as a souvenir," smiled the nurse. "The surgeon took it from your leg."

"Take it away," snapped the doughboy. "I don't want anything around me that was made in Germany."

NEW INSTRUMENTS AND EQUIPMENT

VINCENZ MUELLER, Technical Editor.
GEO. W. WALLERICH, Associate Editor.

Please address items of news and inquiries regarding New Instruments and Appliances to the editor of this department, 327 Southeast Avenue, Oak Park, Illinois.

Adjustable Artificial Legs

In a former issue of this journal, the universal adjustable artificial legs were described, which were then produced in this country principally with the view of supplying them to the medical department of the armies of the allied nations in Europe.

After our country entered the war and some of our own soldiers were sent back who had been unfortunate enough to have to have a leg amputated, it was decided by our medical department to supply these men with temporary artificial legs to be worn only until such a time as a special individual limb could be made for each man.

Several manufacturers submitted legs for inspection and tests, and the legs shown here are some of the types which were accepted; a considerable number of them have been supplied.

The manufacturer of these particular legs, however, was not satisfied with making a temporary limb only, and has persisted in bring his product to such a point of perfection that he is now in a position to offer a leg which is a close rival as regards quality and fit to the legs made to measure.

This particular leg is known as the "Pilling leg" and is made in seven sizes; three sizes for below-knee amputations and four sizes for amputations above the knee joint. The inside measurements of the thigh parts are 17, 18, 19, and 20 inches, and these sockets are adjustable ½-inch on either side. The knee is made of willow and is supplied with an elk-skin bushing for tapered knee irons. This is built so as to be taken up or readily removed if this should become necessary. The shin piece is made of Diamond State fiber formed into the shape of the leg by a special process which gives to it great strength so as to make it practically indestructible. The lower part of the shin piece, as well as the ankle and foot are made of willow covered with rawhide, and the knee and ankle joints of steel and bronze. The customary rubber inserts in heel and toes are provided, and the toe hinge is made of canvas belting, which is said to be much more durable than the leather ordinarily used. The ankle has a 1½-inch dowel 5 inches in length, fitting into the shin piece, thus making it adjustable as to length as well as permitting the wearer to turn the foot in a desired direction.

Fig. 1. (To left) Adjustable leg for below-knee amputation. (To right) Adjustable leg for thigh amputation.

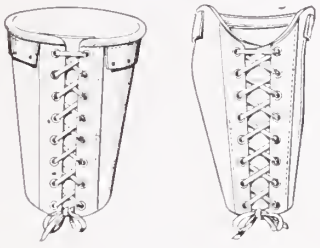


Fig. 2. Soft leather inner sockets, for use with Universal adjustable legs.

Each leg is supplied with two inner leather sockets, thus permitting of a change. These sockets are of soft leather, laced, and adjust themselves readily to the shape of stump of the wearer. They are fastened to the thigh or shin piece by means of laces.

From the foregoing description, it will be seen that it is now possible for a surgeon to secure an artificial leg for his patient practically as quickly and in the same manner as he is in the habit of ordering and receiving elastic stockings, etc., that is, by simply stating the particulars of the case and sending in the measurements of the stump.

A Non-Rubber Elastic Bandage

A new non-rubber but elastic bandage has recently been perfected in this country. The bandage is made of long fiber sea-island cotton, spun, twisted, and woven so as to give it all the required elasticity, but having the great advantage of outlasting the rubber bandage many times.

The "Ace bandage," as this is commercially known, can be sterilized, boiled, or washed without injury. The porous weave insures coolness and comfort, and the soft feathered edges will not ravel, thus adding greatly to the life of each bandage.

Ace bandages stretch without narrowing, roll evenly without need of reversing, fit comfortably, and exert a constant, firm, and even pressure which can be varied to meet conditions.

They are indicated in most cases where rubber or flannel bandages or elastic stockings are generally used, such as varicose veins, ulcers, bruises, swellings, sprains, weak joints, after the treatment of fractures, and for the building up of stumps after amputating; in fact, in most cases where a support and pressure is needed.

In industrial hospitals the Ace bandage will prove indispensable, because its use in accident cases, such as

Ace non-rubber, elastic bandage.

sprains and dislocations, will relieve the pain, give needed support, and will often allow the patient to continue his work.

In the maternity ward the Ace bandage should be of particular interest, because the 6- or 8-inch width can be used as an abdominal binder; the 4- and 5-inch width makes an excellent breast binder and the 2½-inch or 3-inch width is especially useful in the treatment of milk legs.

In the out-patient department, where cases of varicose veins are treated, the Ace bandage will find its best use, because, if it is properly adjusted, the pressure can be applied where most needed without discomfort to the patient. If the bandage is used in the out-patient department, it is always best to recommend the use of two bandages, so that one bandage may be washed and thoroughly dried while the other is used.

For washing the Ace bandage, only warm water and a mild soap is needed. In this washing process the bandage suffers no damage, but it completely regains its former elasticity—an elasticity somewhat lost by the steady expansion. Care should be taken not to stretch the bandage while it is in the process of drying.

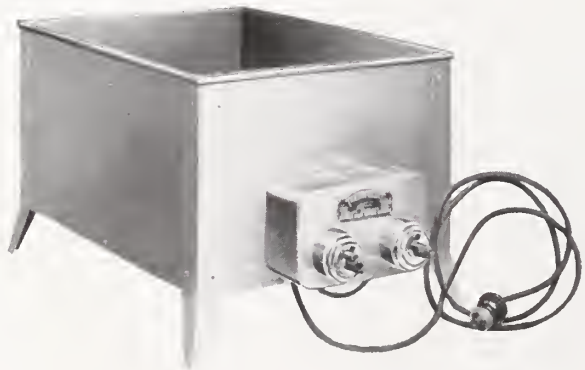
The bandage is made in 2, 2½, 3, 3½, 4, 5, 6 and 8-inch widths, and measures 5½ yards stretched.

Serological Water Bath

The water bath here shown, has some new features which have been favorably received by laboratory technicians. The water bath is capable of operating at 37.5 C., for such tests as the Wassermann and also of operating at a temperature of 56 C., for inactivating work.

In the bath illustrated, either of these temperatures may be obtained simply by snapping the switch marked with the desired temperature, making it unnecessary to duplicate the apparatus. These baths are made of copper, heavily nickel-plated. The electric heating element is the immersion type; the element extends the full length of the bath and is entirely surrounded by water. The thermelect multiple-contact thermostats are used. These thermostats may be repeatedly heated and cooled without the temperature adjustment changing, as they are constructed in a manner in which all stress and strain is relieved in the metal parts in cooling. The contacts are operated at a very conservative current value. The thermostats may be adjusted to operate at any desired temperature, by simply turning the adjustment screw provided under the cap.

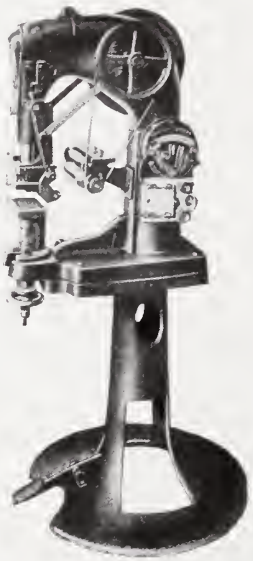
These baths are capable of operating on alternating or direct current of 110 volts, and are made in the following sizes: 18 by 12½ by 5 inches, holding nine 22-hole test-tube racks, and 24 by 12½ by 5 inches, holding twelve 22-hole test-tube racks.



Serological water bath.

An Improved Marking Machine

A new model of the National marking machine has recently been perfected, so arranged that the date the linen is put into service can be put into the die and made interchangeable. "Model H-3," as this machine is called, produces a much larger and plainer mark on the linens than the old. It should be used in marking sheets, pillow cases, towels, bed linen, table cloths, napkins and all table linens, blankets, quilts, and, in fact, every other piece of linen or clothing that is to be marked for identification.



Marking machine, Model H-3.

The well-known No. 8 power type National marking machine and the hand-operated equipments naturally have their place, but the new model is not limited as to the size of the characters.

All wearing parts have been carefully constructed, and the matter of changing dies is a detail which requires but a moment's time.

A tuberculosis hospital building is being erected as a new unit in the Woodlawn hospital group north of Dallas, Tex. The building will care for seventy patients, and will receive patients in both early and advanced stages of the disease. The cost of the structure will be shared equally by the city and the county of Dallas.

THE MODERN HOSPITAL

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A HOSPITAL WHICH WAS BUILT TO ENDURE

The Rhode Island Hospital Develops on Foundations Laid Down Long Ago—A Home-Like Institution, Durably and Sensibly Built—Some Examples of Economy in Administration

By J. J. WEBER, Associate Director, Boston Dispensary, Boston

ONE cannot nose about the Rhode Island Hospital at Providence, Rhode Island, for the greater part of two days, as I did recently, without coming away with two or three fairly clear-cut impressions: one, that the founders of the hospital were men of great foresight, and they and their successors, good builders; another, that the hospital is run as economically as it can be, consistent with good service; and a third, that a warm, home-like atmosphere pervades the institution in contrast to the cold, forbidding spirit that now and again prevails in hospitals.

After driving from the railroad station to the hospital through a section of the city crowded with homes and factories, one is pleasantly surprised at coming out upon a park-like plot of twenty-eight acres of ground with a group of hospital buildings standing well back from the thoroughfare. The trustees of the hospital were far-sighted in purchasing this large acreage and in

Fig. 1. Rhode Island Hospital, Providence, R. I., a hospital which has endured and grown for fifty years.

subsequently acquiring additional adjacent property. The spacious site gives the institution ample light and air as well as adequate grounds for necessary expansion into a homogeneous group of buildings on a single plot of ground, a condition which through lack of foresight is wanting in many growing hospitals. The Rhode Island Hospital has its own greenhouse where plants and flowers are raised, which later decorate the wards and rooms or fill the flower beds artistically scattered about the grounds.

Not only are the grounds adequate, but the buildings are substantially constructed and the rooms well arranged and equipped. This applies in large measure even to those original buildings

Fig. 2. Where the white work of the hospital is done.

constructed back in 1868. The founders agreed upon a well-thought-out plan for the construction and future growth of the hospital, and the buildings were so constructed as to admit, when necessary, of the expansion of some of their features at slight expense for alterations. This point bears emphasizing because all too often building committees fail for one reason or another to take into consideration future growth. Subsequent buildings, such as the service building, the nurses' home, and the addition to the dispensary, were erected only after prolonged and careful study, during which both the purpose of the buildings and also efficient and economic administration were never lost to sight. Just how much thought was put into planning with an eye to efficient administration and economy of space, labor, and material, becomes apparent to any one visiting the hospital's service building. Whatever side one may have taken on the question of whether or not it is wise to locate a hospital kitchen on any but the ground or basement floor, one must admit that the kitchen of the Rhode Island Hospital, located on the second or top story of the service building, would in itself be difficult to improve upon. The floor space is ample without being excessive, the equipment and accessory rooms complete and so arranged in relation to each other as to insure a minimum number of movements to accomplish desired results and an orderly routing of activities. The floor of the kitchen is Hudson River blue stone. This was chosen because similar stone had stood up under forty-five years of service in the hospital's old kitchen. The hoods over the ranges and caldrons are connected with a flue leading to the hospital's high chimney, around which the service building was constructed, so that they carry off all the odors and practically all the steam. Not only are there windows on two sides of the kitchen, but a chain of sixteen vertical skylight windows give additional light and ventilation. I could not detect the trace of the cooking odors so often found in the kitchens of hospitals and other institutions. A feature worthy of special note is the method of piping the hot and cold water to the caldrons as well as the gas to the stoves. Frequently these pipes are laid under the floor and, when in need of repair, necessitate tearing up the floor, to say nothing of causing the workers to suffer needless back-breaking and to run the danger of being scalded. Here they are fully three feet from the floor and easily accessible when in need of repair. Another interesting feature is a small, well-ventilated drying closet for the dishrags and towels. The cook's stores, two refrigerators, elevator lift, dishwashing rooms, and roasting oven, all lead out from this main kitchen, while a step or two through a corridor brings one to the

Fig. 3. Ready for a sea bath. Patients from "Allen Hospital."

Fig. 4. A few of the family from the infants' ward.

preparation room and the bakery. In the garbage room, the barrels stand on heavy removable wooden racks about a foot from the ground. This arrangement makes it easy to keep the racks and room clean and free from offensive odors. Trucks of a height similar to the racks obviate the necessity of lifting the barrels when they are to be carted away.

Were we to trace this refuse as well as that taken from the various serving rooms, we should find it taken twice a day to a shed back of the laundry where it is carefully inspected by an assistant housekeeper for the purpose of discovering waste, and is then emptied into the larger barrels. The superintendent feels one of the best indices of waste is the refuse barrels; they are watched closely. If food is good, well cooked, and tastefully served, waste will be at a minimum. For its garbage, of which there are three or four barrels a day, the hospital receives a substantial sum each month. This garbage shed is equipped with hot and cold water and hose with which to wash out the barrels and a differential fall for loading them on to the truck. Adjoining the garbage shed is a brick enclosure in which is installed the grate of a discarded boiler set. This is used as an incinerator, where, after an inspection by an official, the refuse is burned each day by its own heat. The general adoption of this plan would save hospitals a measurable part of their gas bills.

The question of food economy in hospitals, as elsewhere, involves three factors. Food must be good, properly cooked, and attractively served. Rhode Island Hospital feels that it has solved the problem as far as the first two factors are concerned. As in many other hospitals, however, the third factor has not been satisfactorily solved, but the Rhode Island Hospital is faithfully working on the problem. Not being satisfied with any of the food trucks on the market for keeping food hot in transit, the Rhode Island Hospital is experimenting with a device built on the principle of a fireless cooker. This is being tried in transporting food to a small group of private rooms. Should it prove satisfactory, larger ones will be built for transmitting food to the large public wards. The plan then is to wheel these trucks into the wards and serve each patient at his bedside. One nurse will wheel in a truck with the dishes, silver-ware, and other accessories, while other nurses serve the food in character and amount as the patients desire.

Adjoining the main kitchen is the diet kitchen, with its own milk and general refrigerators. The unique feature of this room is the shelves along one wall which are so built as to hold the various trays with their legs swung under and held by spring devices until they need to be released and placed on the bed. This buckling under of the legs of the trays also permits of their

Fig. 5. Five o'clock tea among the tables of the Rhode Island Hospital.

easy compact transporation in a special truck to the various rooms.

The sewing room with its adjoining clothes and linen room is also on the top floor of the service building. This is a spacious room with two huge cutting tables, 3 feet high and having working surfaces 5 by 9 feet, with three tiers of drawers, each a yard wide. Here are five power machines for sewing and one for darning. This department is a great money-saver, for materials are bought at wholesale when the market is low

and made up into sheets and pillow cases, nightgowns, bandages, towels, and operating-room gowns. Here all the repairing is also done. I noticed a quantity of irregular pieces of cotton lying on one of the tables and, upon inquiry, was informed that these were remnants sent in by the Red Cross. The pieces were large enough to be made into by-products in the form of the sleeves of children's gowns.

Once a week the housekeeper and superintendent of nurses inspects the wards for linen gone astray. But for this inspection, the linen would every now and again get tucked away in some unknown cupboard.

The dining rooms for the doctors, nurses, and employees and their respective serving room occupy the first floor of the service building. The nurses' dining room, which will seat two hundred nurses, is especially attractive. It has windows on three sides and is consequently light and airy. The furniture in these rooms was especially designed at the hospital with a view to making it attractive and at the same time simple in line, comfortable, and substantial—a combination of qualities which the hospital was unable to find in the salesrooms of the furniture dealers. Connected with the dining rooms of both the male and female employees are clothes rooms, where those coming from outside can leave their outer wraps. Each of these rooms is equipped with a washstand and toilet. Each day the superintendent receives from the dietitian the house diet for the day classified for doctors, nurses, help, and wards. In addition to this, there comes to him from each of the dining rooms—employees' dining rooms as well as those of the various wards—little slips listing what was served at the three meals of the previous day with any comments or criticism. These are filed in a scrap book for possible future reference.

Fig. 6. A corner of the shining, efficient room where the cooking is done.

Although the basement of the service[1] building is devoted wholly to storerooms (marvels of their kind in neatness and arrangement) the Rhode Island Hospital rents space from the Merchant's Warehouse and Cold Storage Company for the storage of eggs, butter, poultry, etc., which it buys from time to time in large quantities. When, for example, eggs are ample and cheap in April, the hospital buys a carload lot, places them in storage, and begins to use them for cooking purposes in August when the price has gone up. They are drawn from storage twice a week, and each egg is candled at the hospital before it is sent to the kitchen or the wards. Fruits and vegetables bought when the market is low are canned. When I visited the hospital, 30,000 pounds of canned goods were resting on the shelves of the storeroom. For the soap storage and drying room the hospital selected a room through which ran the smoke flue leading to the chimney. This room is especially warm and adapted to the drying out of soap—a big money-saving process.

The hospital's general repair shop, where many home-made devices are conceived and manufactured by the chief engineer, an inventive genius, is a great money-saver. From all over the hospital there come to this spacious room scores of articles, all properly marked for identification, needing to be repaired, altered, or painted. The nurses are instructed to send articles to the repair shop at the first indication of need of repair, observing the principle that "a stitch in time saves nine." Several men skilled in carpentry, plumbing, painting, and masonry are kept steadily at work here and in and about the hospital. Twice a week the faucets throughout the hospital are inspected and when necessary adjusted and repaired. Every Monday one of the men makes the rounds of the hospital building and looks after the fire pails, extinguishers, and axes, and winds and regulates some sixty clocks.

The hospital has a splendid suite of five operating rooms with their accessory rooms on the top floor of the main administration building. The feature that interested me most in this connection was the special rooms with three or four beds, off the surgical wards, where special patients are brought after operation. They remain here from three to five days under the supervision of nurses who devote themselves exclusively to these patients before they are returned to the wards proper. This arrangement keeps the ward patients from being subjected to the odor of

1. The service building of the Rhode Island Hospital is described in detail in an article by Warren C. Hill in THE MODERN HOSPITAL, February, 1919, p. 85.

ether and gives all patients who have been operated on the watchful care of a nurse not distracted by other duties.

This article would not be complete without some reference to the children's ward. Here were some seventy children, many of them strapped on curved frames, but all happy as could be. Surely if a man had the blues, a visit to this ward would drive them helter-skelter. The hospital employs a full-time teacher who teaches the various grade lessons; most of the pupils when discharged from the hospital are able to keep up with their grades in school, and some do even better than the well children out in the community. When I was at the hospital, a large American flag was being hung in the ward, to be unfurled at an appropriate time during the singing of one of the children's Christmas songs. While I was visiting the ward, the children sang several of the popular Christmas songs with a spirit and vim that would do credit to a group of lusty children, and several of the little ones spoke short pieces relating to Christmas and the coming of Santa Claus. During the summer, many of these children are transferred to the hospital's summer home for children.

Toward the close of my visit and after we had gone the rounds of the hospital, the superintendent led me down a stairway leading off the main waiting room into the basement, into a suite of rooms which was at one time devoted to storage. It is now the lounging room used by the interns, mainly at night. Here is a large, long room, with a piano, billiard table, phonograph, books, magazines, comfortable chairs, and couches. The walls are covered with groups of pictures of former interns. Everything looks cosy, comfortable and den-like—the sort of place where a group of men can feel altogether at home. In a small, adjacent room, which serves as a combination kitchen and dining room, is a center table, a sideboard full of dishes, and a small gas stove. Every evening one of the maids brings in a supply of eggs, bread, milk, coffee, and tea, and the men, when their services are not needed in the wards, gather here for a midnight lunch, a smoke, and a game of billiards. Here they are away from everyone and can make as much noise as they like without running the risk of disturbing anyone else in the hospital.

Like most other hospitals, Rhode Island Hospital is usually not without a deficit each year. To help in meeting these annual deficits, this scheme has been adopted: each year four to five thousand letters are sent throughout Rhode Island to people of means asking them to underwrite any possible deficit at the end of the year up to one

Fig. 7. "Washing up" in the nursery of the Rhode Island Hospital.

hundred dollars with the understanding that, having entered upon this obligation, they will not be asked for any further contributions. This scheme was started many years ago and now the hospital has a body of men who agree each year to meet any deficit up to one hundred dollars. Since 1910 and up to the present year the full one hundred dollars has been called for. But this year only $67.35 per share was asked for. Not only has this scheme an immediate practical value in meeting the annual deficits, but, since the hospital is kept before a group of three or four thousand people every year, many of the men and women appealed to are bound to remember the hospital when they make their wills. Another plan for increasing the income of the hospital, which, however, is not new, is that of establishing free beds. Anyone by making a payment of $4,000 may establish a free bed. Few of these beds are used by the donors the year round and the contributions are usually clear gain. The hospital now has 178 free beds.

The Process in Salvaging Used Gauze at Lakeside Hospital, Cleveland

The gauze to be washed is collected from the wards in net bags and placed in the washer about 3 p. m. It is given first five cold-water rinses. It is then left to stand over night in lukewarm water in the washer. Two quarts of soda and one quart of bleach are added to the water. The bleach is composed of 30 gallons of water, 15 pounds of soda, and 10 pounds of chloride lime. This water is then drained, and from 3 to 4 inches of hot water are run in with soda and soap for twenty minutes and discharged. Then from 3 to 4 inches of hot water are run in with two quarts of the bleach. This is boiled for fifteen minutes and discharged. About 8 inches of hot water are then run in, a substitute for oxalic acid is added, and the whole boiled ten minutes. Two cold waters are then run in.

The gauze is then sterilized in the large autoclave before it is handled in any way.

A SUGGESTION FOR THE PRACTICAL TRAINING OF PUBLIC HEALTH NURSES

Public Health Nursing to Be a Part of Municipal Health Service—Cooperation with Training Schools—Emphasis on Child Hygiene and Preventable Disease—Value and Practicability of the Plan

By CARL E. McCOMBS, M.D., Chief of the Division of Public Health of the New York Bureau of Municipal Research, New York City

DURING the past six years the New York Bureau of Municipal Research has made studies of municipal health service in about twenty large cities of the United States and Canada, and in none of these cities has there been found a fully adequate public health nursing service. That there is generally throughout the country, and particularly in our large municipalities, a broad field of opportunity for public health nurses is indicated in a recent report by Franz Schneider, Jr., formerly sanitarian of the Russell Sage Foundation, on "A Survey of the Activities of Municipal Health Departments in the United States." Mr. Schneider points out that of the 163 cities included in his survey over one-half had no proper organization for combating infant mortality and less than one-quarter a coherent program against tuberculosis—two fields of service in which public health nurses have clearly demonstrated their usefulness.

There are many cities of more than fifty thousand inhabitants in which no public health nursing service whatever is provided either by the local health authorities or by private agencies, although many of these cities are in dire need of effective work for the prevention of infant mortality and tuberculosis. In many other cities public health nursing service is available to the municipal authorities only through the cooperation of private visiting nursing or social service agencies, and the fact that the most efficient public health nursing requires that the official health authority, i. e., the municipal health department, shall have the direction of nursing work makes such cooperative relationships relatively unsatisfactory. As Dr. C. E. Terry, who has written so much and done so much to promote public health nursing, says: "We must bear in mind that the time is coming if indeed it has not already arrived when this (i. e., public health nursing) should be distinctly a municipal function. The days of experiment are past and private nursing agencies have no longer a place in any community where due recognition is given to modern methods of health conservation."

If we accept the dictum that public health nursing is truly a function of municipal health service, and that to be most effective it should be completely under the direction and supervision of the municipal health authority, the problem of providing properly trained nurses for such service is one of considerable importance. Every municipal health officer who has had experience in the development of a public health nursing service knows how difficult it is to secure nurses who are adequately trained and otherwise fitted for such service. Dr. George W. Goler, health officer of Rochester, N. Y., one of the ablest and most progressive health officers in this country, says with reference to his own nursing service: "The training of the nurse in infectious disease work has been generally so bad that when nurses come to work for us at the health bureau the first thing we do is to try to get them to cast off all the old notions of infectious diseases that they have gathered from their former teaching." The opinion of Dr. Goler is simply an echo of opinions voiced by many other municipal health officers.

One health officer in a city of over four hundred thousand population stated that he had found the so-called "practical nurses" more efficient for his nursing service than the majority of trained nurses because they had so much less to forget and were quicker in adjusting themselves to home visiting work. From evidence obtained by study of municipal public health work, and from the statements of progressive health officers, it seems quite certain that more practical public health work for nurses in training schools is desirable. Of course, the nurse who can afford to attend post-graduate courses in public health nursing before entering public health service, should do so by all means, but even post-graduate courses in public health nursing do not provide that practical training which is so essential. Besides, there are many nurses who cannot afford to continue their training in post-graduate schools.

The National Organization for Public Health Nursing, which has been a leader in urging more practical training in public health for nurses, has made, through its committee on public health nursing, some excellent suggestions for broadening the curriculum of training schools for nurses and some of these suggestions have already been adopted by such schools. Many training schools for nurses are now affiliated with social service agencies and private nursing associations, and

provision has been made for the practical training of some, at least, of the students of the training schools. But there is still another field for practical training to which little attention has as yet been given—namely, municipal health departments—and the purpose of this paper is to suggest a closer affiliation for mutual advantage between municipal health departments and nurses' training schools.

Before discussing the difficulties of working out a satisfactory plan of cooperation between the hospital training school and the municipal health department, let us consider some of the reasons why such cooperation is desirable. Practical training for nurses desiring to enter public health service is admittedly necessary—but is not practical training in public health desirable, even necessary, for *all* nurses? Every day and in every possible manner the importance of public health work in conserving our national resources is being impressed upon us. The wonderful progress made in public health by our nation in war has opened our eyes to the necessity of more effective health conservation in peace. People are more interested in health than ever before, and hand in hand with this growing interest goes education to teach citizens how to form intelligent judgments in health matters. The nurse in private practice finds that her patients and the members of their families expect her to know more about public health. She is called upon to answer all manner of questions about communicable diseases, prevention of infant mortality, home sanitation and personal hygiene, and, to answer such questions satisfactorily, she must have at least a working knowledge of public health procedures. This she can secure only through actual personal experience.

It would of course be to the great advantage of the nurse wishing to enter public health service to have first-hand knowledge of its aims, its methods, and its rewards. If she is given some practical experience under the direction of the health authority of the community, she will have an opportunity to find herself and to determine for herself whether or not she is fitted for the work. Not all nurses who go into public health service are fitted for it, for it requires, in addition to thorough training, tact, clear judgment, sound common sense, and that indefinable attribute we call "personality." The nurse must be physically fit in every sense of the word; she must be able to elicit the cooperation of those with whom she comes in contact; she must love children and know how to "handle" them; she must be sympathetic and patient in dealing with those who depend upon her for help; and she must have initiative and energy in bringing about the desired result. In short, she must have the faculty of dealing with people as persons rather than as "cases." Under the direction of a competent public health officer, her capability for public health work could be measured and appraised. If she is unfitted for public health work, it is desirable that she know it before she goes into it, so that her future work in the training school may be directed along other lines.

Finally, such an arrangement would be extremely valuable in raising the standard of municipal health service by making it possible for many health departments to obtain service which they are not now able to provide. Other municipal health departments, now inadequately supplied with nurses, could be provided with more nurses at low cost. If proper cooperation with training schools for nurses were effected, municipal health departments should of course assume the responsibility of paying the nurses in training salaries equal, at least, to the stipends which they receive as pupil nurses in the hospital training schools. Furthermore, municipal health departments would gain in efficiency by the very fact of becoming teaching agencies. Just as the teaching hospitals are more efficient than non-teaching hospitals, so teaching health departments would be more efficient than non-teaching health departments.

As to the difficulties in the way of working out a satisfactory plan of cooperation between the training schools for nurses and municipal health departments, two only appear important. The first is that the training schools might have considerable difficulty in adjusting their curriculums so that all nurses in training could receive practical experience in municipal health service, for with the ever growing volume of medical and nursing lore, training schools are already finding the period of training too short. But the importance of practical training in public health work is so great that it is believed other and less important features of training might be curtailed to meet public health needs. If necessary the course of training could, of course, be lengthened, and this is already being considered in many training schools. The second difficulty is that unless the cooperative relationship between the training schools and the municipal health departments were developed with great care, there might be a tendency on the part of municipal health departments, in their desire to get their work done, to exploit the nurses assigned to them. Some training school superintendents have expressed fears on this score, but knowing how willingly and sincerely municipal health authori-

ties cooperate in all that makes for public health progress, it is believed that this danger is more imaginary than real.

The length of the course of practical training in municipal health work would, of course, be dependent largely upon the extent of the development of municipal health service with which the training school had cooperation. Under any circumstances, it certainly should not be less than three months.

In a large municipal department of health such as that of the city of New York, where health service is perhaps more highly specialized than that of any other city of this country, a six months' course would be none too long. In a smaller city, where the services demanded are not so varied or extensive, three months would perhaps be adequate. Let us consider for a moment what such a course of training should embrace in a large municipal health department, such as that of New York City.

The two broad fields of work in which public health nurses are most useful are child hygiene and preventable diseases. In child hygiene a nurse should have practical training in prenatal home visiting and the instruction of expectant mothers; in infant clinics; in midwife inspection and education; in the health supervision of children in schools, in the home, and in institutions. In preventable disease work the nurse should have experience in the home visiting and investigation of cases of communicable disease, particularly tuberculosis and typhoid fever; in clinics for tuberculosis, venereal diseases, and industrial diseases. If possible, other features of health work, such as food inspection, sanitary inspection, etc., should be included in her training, but this experience could be made incidental to her work in child hygiene and preventable diseases. The nurse who goes about her work with her eyes open soon develops the faculty of observing conditions not strictly within her own field and the value of her work increases as her public health vision broadens.

The suggestion which is made in this paper is a suggestion only. If it does no more than provoke discussion among training school authorities and public health officials it will have fulfilled its immediate purpose, for from such discussion, it is believed, would be crystallized out a more definite plan for practical public health training for all nurses.

SPECIAL PROBLEMS OF HOSPITAL ADMINISTRATION

Relation of Staff and Superintendent—No Member of Staff Should Be on Administrative Board—Medical Responsibility of Superintendent Depends on His Professional Training

By HERBERT O. COLLINS, M.D., Superintendent, Winnipeg General Hospital, Winnipeg, Man.

COOPERATION between the administrative and the medical staffs is ably discussed in the article following. How far the two may work together and not trespass upon the functions of each other is clearly defined by Dr. Collins.

EDITORS.

WHAT PART SHOULD THE STAFF MEMBER HAVE IN THE ADMINISTRATIVE ACTIVITIES OF THE INSTITUTION?

The problems of administration are so different from those encountered in connection with the clinical work, and are often so little appreciated by members of the staff, that in most cases it will be found best to draw a sharp line of separation between the two. As no self-respecting member of the staff would tolerate for a moment any interference on the part of the administration with his free judgment of the proper treatment of a case, so he should willingly refrain from the slightest act or word which could be construed as an effort to dictate administrative policies, or which might embarrass the administration in any way in the enforcement of order and discipline.

Nothing tends more surely to cause friction and unpleasant complications than membership of one or more of the staff on the administrative board of a hospital. No matter how careful or tactful such a staff member may be, jealousies on the part of other members of the staff are sure to arise, and the board member will be accused, often unjustly, of taking advantage of his administrative authority to gain for himself or his patients privileges not accorded to others. The one-man hospital is usually a deformed and crippled institution.

This is by no means to be interpreted as meaning that the staff should take no interest in the administration. On the contrary, it should be invited to take considerable interest, just as the administration should keep in close touch with the clinical side of hospital affairs. In no other way can we expect that sympathetic cooperation

so necessary to success. It will be found of distinct advantage to have a committee appointed to represent the views of the staff on administration matters. This committee should be frequently consulted, especially as to needs of the hospital and policies to be adopted. But the communications of such a committee should be understood as advisory only and in no way binding upon those charged with administrative responsibilities.

HOW FAR IS THE SUPERINTENDENT RESPONSIBLE FOR THE MEDICAL SERVICE IN THE HOSPITAL?

The responsibility of the superintendent for the medical service in the hospital is directly proportional to his authority over the staff.

If he appoints staff members, or if they are appointed by the board on the superintendent's nomination, and subject to removal or suspension by him, his responsibility for the general character of the service rendered is very great. If he has no power of appointment or removal, he should be considered as largely free from such responsibility. For even though it may be made his duty to report to a board any evidence of failure on the part of a staff member to give proper service, the superintendent can hardly be expected to act in such a rôle except in extreme cases.

If he be the right kind of a superintendent, there should be no hesitation in placing upon him full responsibility for the maintenance of the proper professional standards of the hospital, providing he is also given the necessary authority to justify it.

If the superintendent is not a physician, but a nurse or a layman, only friction will result from any attempt to hold him or her responsible for the character of the medical service, except in extreme cases. The superintendent who would see patients in his hospital grossly neglected or receiving treatment in any way below the standard, and fail to take such action as may be within his power to correct the evil, would be guilty of neglect in properly protecting his institutions' reputation and the interest of the patients committed to its care. But he can hardly afford to place himself in the position of a bearer of tales for the board, without his being constantly placed in a very undesirable light.

If the superintendent be a physician, he should be given such powers as will justify him in assuming considerable control over the medical service. In fact, under these conditions, he should be held responsible for its general character, just as he is for any other service in the hospital. He cannot be expected to interfere with the details of treatment and will need to be very diplomatic in exercising his authority. But the consideration of the broader questions involved, for the general tone of the medical service, for the enforcement of the recognized principles of medical ethics, the medical superintendent should be held responsible with full authority and power.

The work of the medical staff can not be held up to standard unless it receives the full and intelligent and sympathetic support of the superintendent. Hence, he has duties and obligations to assume, as well as authority. He should consider himself largely personally responsible, in so far as the means of his hospital permit, for seeing that the medical staff is furnished with the equipment and supplies required by them, and that the nursing and other service of the hospital are adequate to give the staff the necessary support in their work. Frequent consultations with the members of the staff, or with a committee representing it, if the staff be a large one, will enable him to keep in close touch with its needs, to cooperate intelligently with those who are doing the clinical work, and will also tend to avoid criticism on the part of the staff members by giving them a chance to become familiar with the problems of administration, and to know the reasons for failure, at times, to grant their requests.

SHOULD THERE BE DEFINITE RULES FOR THE GOVERNMENT OF THE HOSPITAL?

There can be no question as to the advantage of definite rules governing the most important points in the administration of the hospital. Otherwise there will be no order or cooperation, nor any fixed methods of doing things. But such rules, if we are to refer to fixed and established regulations, probably contained in a book of rules, will be better if limited to the most important matters, and should not attempt to go into details too much because of the ever-changing conditions which make it desirable to change methods and rules to meet different situations as they develop.

Such printed rules as may be adopted will be best if they are outlined by the heads of the departments most affected. In order to prevent duplication or conflicting orders, however, it will be best to have all rules and standing orders issued directly from the office of the superintendent. The more important rules, especially those affecting the general policies of the hospital, should also be approved by the governing board.

Somewhere or other in the worst flood of trouble there always is a dry spot for contentment to get its foot on; and if there were not, it would learn to swim.

THE WINCHESTER HOSPITAL, WINCHESTER, MASS., MEETS SPECIAL NEEDS

Problems of Small, Semi-Public Community Hospital Met—Hospital Built With an Eye to Economy and Future Extensions

By WARREN C. HILL, Kendall Taylor Co., Architects, Boston

A GROUP of well-known men, collaborators on the subject of hospital standardization, have referred to the small, semi-public community hospital as one of the most important types of the many different sorts of hospitals which they have had before them for consideration.

The producers of this hospital heartily agree with them; it comes under this classification, and the accompanying drawings and photographs are presented, not as the last word in this sort of hospital construction but as a rather interesting solution of the problem, one which is working out well after two years' trial.

Fig. 1. Main building of the Winchester Hospital, Winchester, Mass.

The town in which this hospital is located lies nine miles north of Boston and has a population of about fourteen hundred. The community is almost wholly residential with but few industries. The per capita wealth is higher than the average, although there are, of course, some of those whom "we have always with us."

The Winchester Visiting Nurses' Association was organized in 1899 and incorporated in 1906 by eleven public-spirited and philanthropic women for the purpose of giving the sick, especially those of limited means, the best home nursing possible and of developing this work along appropriate lines, with a view of ultimately establishing a hospital if the need should arise.

The objects for which the association was started have been consistently and persistently carried on, and the social-service phase of the association work, operated from rooms in the central portion of the town, not from the hospital, is worthy of more than passing mention but is perhaps apart from the subject at hand.

The original hospital was established in an old mansion in March, 1912, with some measure of doubt as to its permanency. The results so exceeded the fondest expectations that within two years the inadequacy of the quarters was so apparent that a campaign for funds for a permanent building was started, which met with a measurable degree of success.

To the trustees and their building committee, all women, this venture was, as is quite usual in such cases, their first hospital experience, but every one of them had an appreciation of her limitation in this respect and, on account of it, learned the quicker from whatever sources information was obtainable. Furthermore, these women did not prejudice themselves greatly by too much visiting of other hospitals—an unusual point to be noted.

The first consideration, after sufficient funds were available, was, of course, the selection of a site, one reasonably accessible yet sufficiently remote from highways with trolley cars or heavy traffic. By process of elimination a splendid location was decided upon, about a mile from the town center, not far from the street cars, and consisting of nearly five acres of high land sloping easily to the west and southwest, fairly well-

Fig. 2. The operating room is finished in ivory enamel on woodwork with French-gray walls and ceilings. A separate ventilating system is used.

wooded for protection purposes, and with excellent, well-drained soil. It might be remarked that the trustees did not purchase the land until the architects had been consulted and reviewed carefully its good or bad features.

This particular type of hospital plan was selected with the expectation that it would care for local people only and not all of these, as the town is close to Boston with its many great hospitals. All the surrounding towns have hospitals of their own and a few patients were expected from them.

Fortunately, the plan was carefully studied for double its capacity, and the plans presented with this paper are the result of a boiling-down process, entered upon to bring the cost of the hospital within the available funds. When the time comes extensions can be made with a minimum interruption to the work in the manner indicated on the block plan.

For topographical reasons the building was placed on the northerly end of the lot, a location which permits of extension south as well as east.

The nurses' home faces the principal street of the four surrounding the lot and is sufficiently removed for all purposes. Later this building will be briefly touched upon.

The type of plan determined, the next step was to decide whether a fireproof building could be built. The architects so strongly urged this that the trustees finally postponed construction for a year in order to raise more money, not for the purpose alone, but in order to build a separate home for the nurses, a feature which was also recommended by the architects.

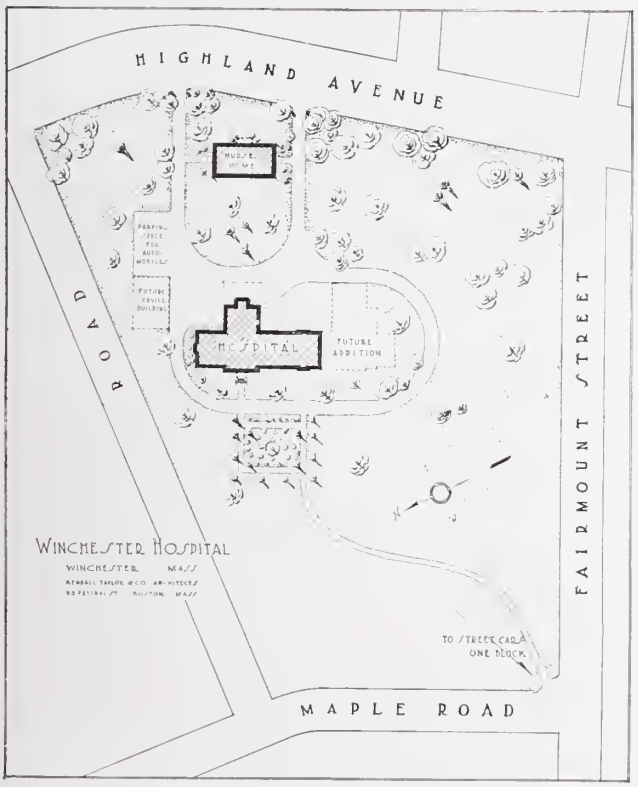


Fig. 3. Block plan of the Winchester Hospital.

The bed capacity was a matter of judgment rather than of determination by statistics, and a maximum of forty was finally considered by the trustees and the visiting staff as sufficient. Subsequent events have demonstrated this to be about right for all services except the obstetrical; here the patronage has been so great as almost to overrun the building. It will be seen that Winchester is a growing town and a provision for this growth must be made very soon.

Fig. 4. Nurses' home of the Winchester Hospital.

It might be stated in passing that the architects have for several years past had difficulty in persuading some of their clients of this established fact:—Provide more than adequate maternity accommodations and in three years' time—assuming your institution is a success—you will have a waiting list larger than a popular club and have to put out the "S. R. O." sign, as the theatrical people do.

The necessity of providing as much for the money as possible, "and then some," unfortunately required the placing of the boiler room and laundry within the building. This is never a good plan and can be excused only for the reasons given and because it is hoped that these utilities may be placed in a separate building to the north, as soon as it is possible to do so. This building will also contain rooms for female domestics in its upper floors.

The space these now occupy will then be used for an x-ray department and adequate laboratories—the hospital does no x-ray work at present (remember, if you will, the contiguity to Boston) and the provisions for laboratories are not very large for similar reasons. The room marked "laboratory" will then be used for a receiving room for occasional accident cases.

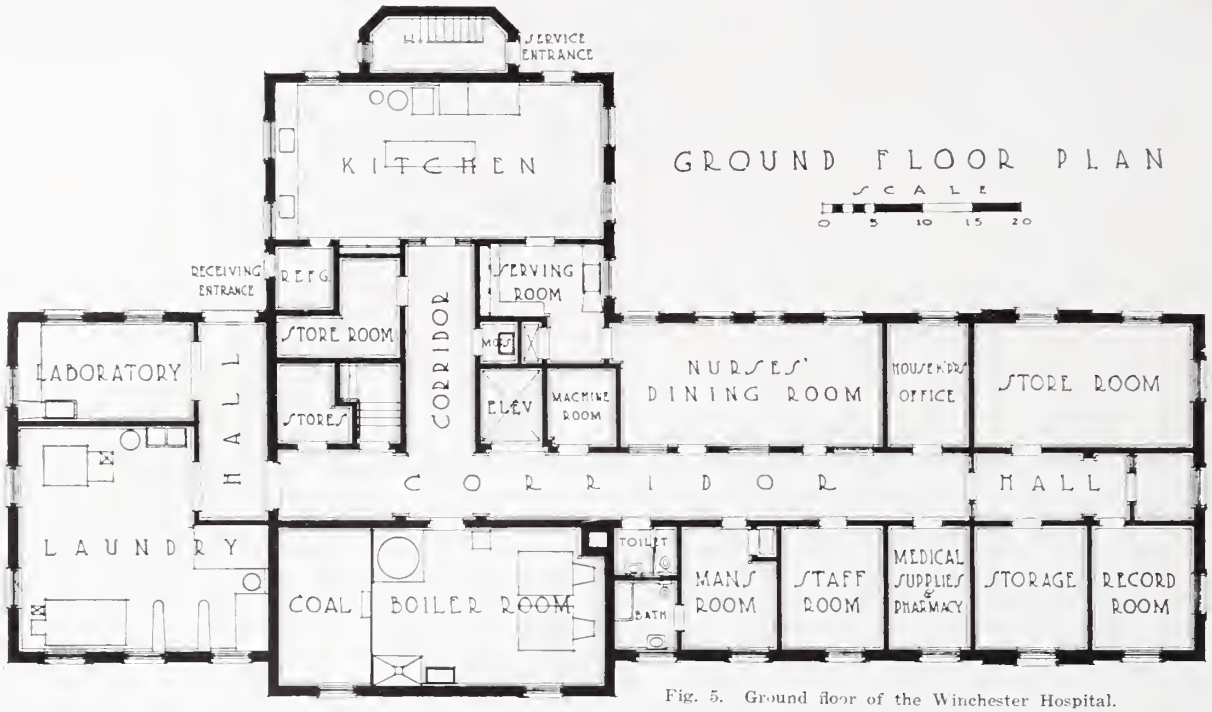


Fig. 5. Ground floor of the Winchester Hospital.

The kitchen is adequate for the present, and further capacity and additional pantry space and a domestics' dining room will be provided when the time comes to extend to the east of this portion of the structure.

A peculiar but very desirable requirement of the Massachusetts district police, who must approve the plans for buildings of this character, is a covered staircase or fire escape at or very close to the extreme end of any wing, in addition to any central staircase that may be provided. This explains the staircase tower adjacent to the kitchen and the one taking a section of the solarium on the south end of the first and second floors. One staircase opens directly on the ground and the other on a platform with steps to grade.

These staircases are skeletonized and bolted together, so that when the time comes for extension in either direction, they can be used again. It will be necessary only to change their location.

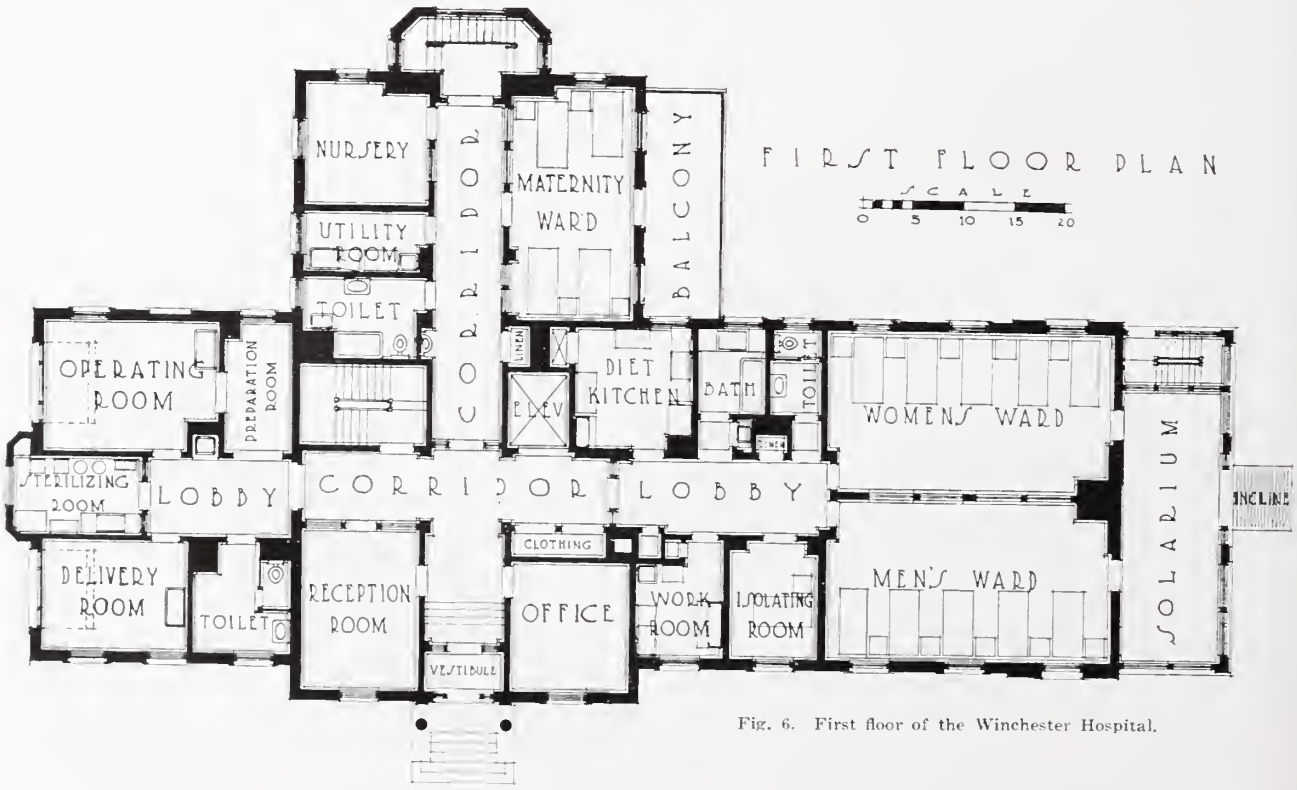
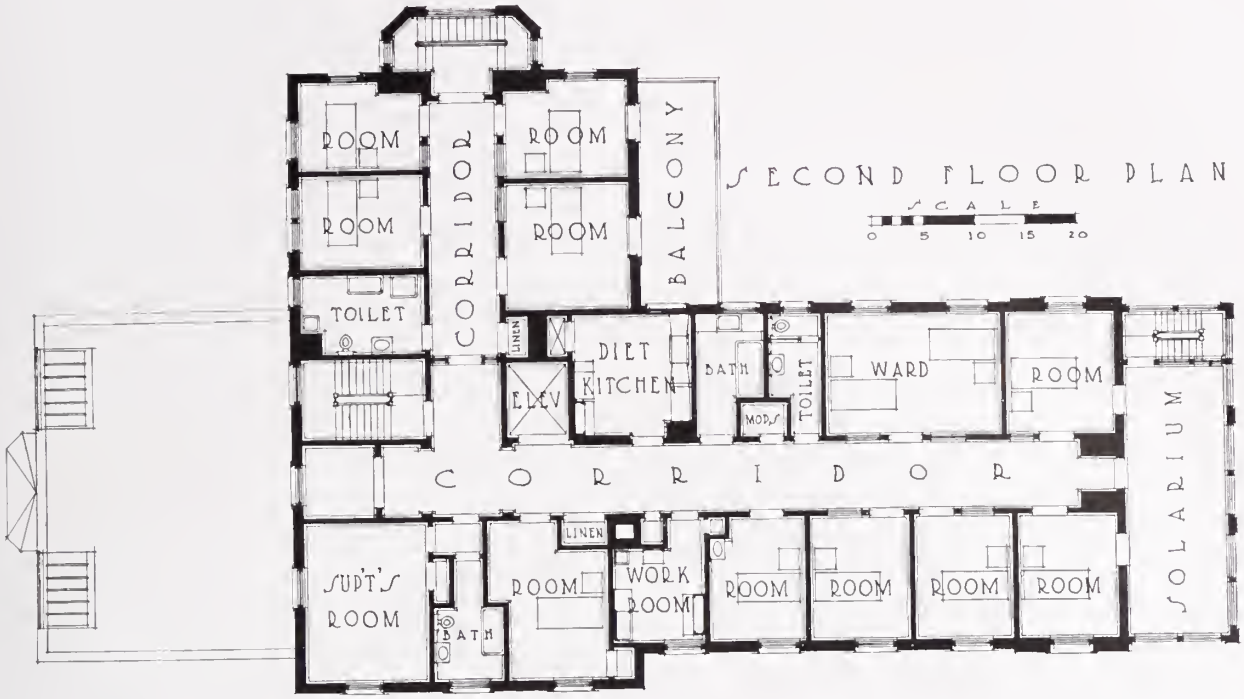


Fig. 6. First floor of the Winchester Hospital.



The housekeeper's office is well located, as actual use has shown; tradesmen use the service or kitchen entrance door for most of their deliveries, and the larger consignments, such as cased goods, can be taken directly into the storeroom through one of the openings.

The staff room is located as it is, simply because there was no other place for it, and, as all the physicians approach from Highland avenue and use the receiving entrance door, this room is very convenient for them. The room has been very tastefully furnished and is much liked.

A glance at the first-floor plan suggests a compactness akin to suffocation until one has made a visit to the hospital, when such an impression is dispelled. It was not possible to place the operating department any place except where it is shown; some day it can be relocated on the second floor directly overhead, or the same space in the second floor can handle maternity work exclusively. No complaint of the arrangement as it is has been made by staff or nurses, and, in spite of expectation, the delivery room in this position has not so far been found in the way.

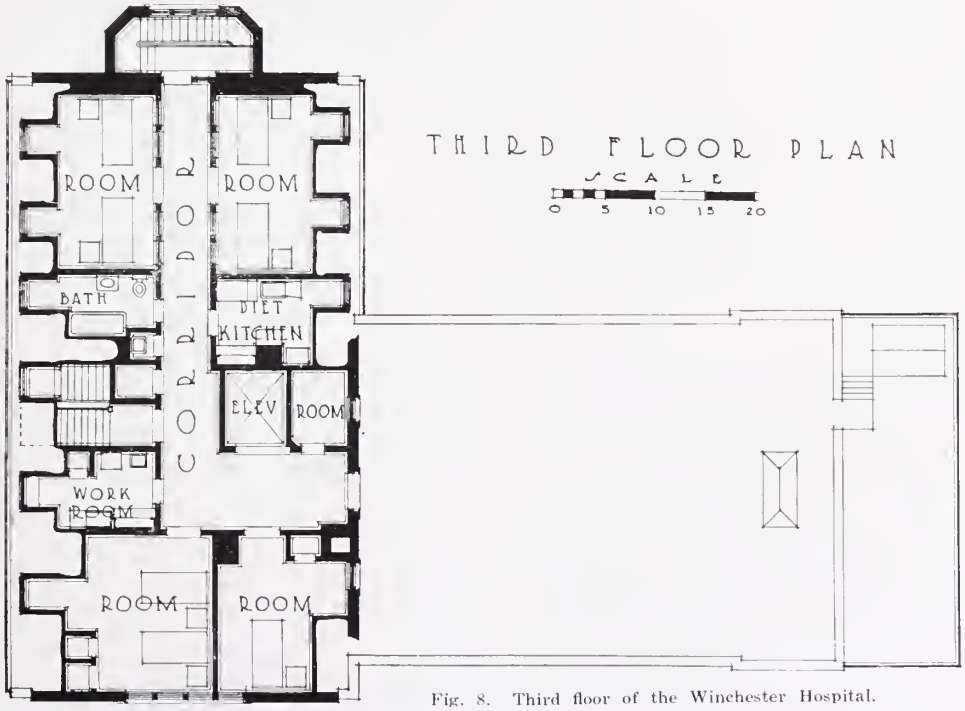


Fig. 8. Third floor of the Winchester Hospital.

The administration portions are adequate for all present purposes, but some time when extensions are made and the workroom is placed in a position more nearly central to the new arrangements, this room and the isolation room too will be made a part of the former by closing the corridor doors and cutting-in communicating doors. The rear or east portion of the main building was originally designed for children, but the children of Winchester somehow seem particularly well and free from accidents, so it is used for maternity ward service.

The duplex ward at the south for medical and surgical service was adopted from necessity rather than from choice; the rooms are cheerful and always filled, the sash in the dividing portion adds to the cheerfulness of the "off side" when the sun is in the east and vice versa, and the use of a sun room in common by both sexes appears to have advantages rather than otherwise. An incline (it looks like a ship's gangplank) permits of easy access to the pleasant grounds adjacent.

It might as well be admitted that one toilet has its disadvantages and that two should have been provided. The construction is so designed that the dividing partition between wards can be removed to allow the corridor to continue on to the extensions when these are made.

The second floor has, beside the private rooms, two two-bed rooms; the portion to the right is reserved for medical and surgical service, and that to the rear, for private obstetrical service. This floor, on the whole, is successful; that is, if popularity means anything. People who might be expected to go to Boston to the larger hospitals prefer the quiet of these rooms with their delightful views to a degree that could not be anticipated before building. If the architects were planning this or another similar hospital in the future, they would be more insistent upon rooms slightly larger, with lavatories in each; and, of course, private toilets would be desirable.

Fig. 9. One of the duplex wards. The sash in the dividing portion adds to the cheerfulness of the "off side" when the sun is in the east and vice versa.

The third floor is surprisingly cool in summer and the rooms much desired; they are used either as single or double rooms. These rooms, originally intended to allow for overflow, have been occupied all the time since the opening. Undeveloped possibilities for out-of-door treatment or recreation present themselves in the flat roof over the wing.

The wood trim—what there is of it—and the doors are of birch, stained a pleasing tobacco brown, except in the operating department, and the varnish is rubbed. In the operating department an ivory enamel was used on the woodwork, with French gray walls and ceilings. All the rooms for patients, including wards and nursery, are painted a gray of lighter shade; buff was used elsewhere throughout the building.

The floors and bases in the kitchen and serving room are of red tile; the toilets, baths, workrooms, operating department, etc. are of white marble terrazzo; all corridors, rooms, and ward floors are of battleship linoleum, green in color. Other floors are of granolithic, and the bases, where there are linoleum floors, are of the same material run up 6 inches on and flush with the walls, coved out onto the floor 3 inches, and are painted green to match the linoleum. The effect is very pleasing.

The plumbing is of the best, and no expense has been spared here. There are no special features other than the wall-hanging water closets which keep the floor under them clear and the specially designed elbow-action valve on the surgeons' sinks. Sterile water is run through lead-lined piping direct to the sinks in the delivery and operating room from a gravity storage tank. In the bathrooms a conservatory arrangement for storing and watering cut flowers is found very convenient and keeps this well-known difficulty well in hand.

Heating is by direct steam. Ventilation for all rooms is provided, separate from the toilets and similar rooms. The ventilation of the operating department is also separate from all other rooms; this room has a small fan over the third-floor ceiling space with a remote control switch in the operating department corridor. The architects thoroughly believe in window control for air changes in a building of this class for all rooms occupied by patients. A high-pressure boiler gives steam for sterilization, laundry, cooking, steam tables, the acceleration coils located in the vent hoods, and the vented drying-closet coils.

The sterilizing equipment is complete, and in each workroom there is a utensil sterilizer for bedpans and adjoining this is a warmed closet in which to place the pans after cleaning for the next call.

The signal system is a silent call type. The lighting fixtures are of a special type designed for patients' rooms to diffuse the light and avoid eyestrain. There are bedside light sockets for each bedside in addition. In the working portions of the hospital the lighting is direct and very adequate, so that the nurses can see and not have to feel what they are doing, avoiding in this a complaint which is frequently heard.

The many other features required to make the present-day hospital a successful working unit were all provided, when there was money for it, even to piping for a vacuum cleaner. The elevator is a modern push-button type.

The nurses' home is a plain, substantial two-and-one-half-story wooden building and accommodates with the superintendent's assistant, twenty people—the top floor is used at the present for female help.

The rooms are of the standard size 9 feet by 12 feet, and the usual assembly and other recreation rooms are under the same roof. It serves its purpose in a splendid way, and an interesting point is, that the cost, exclusive of furnishings was only $12,261. The hospital building cost

Fig. 10. The rooms of the third floor are extremely cool in summer and are much in demand.

$73,981, including laundry, kitchen, and sterilizer equipment, elevator, refrigerators, awnings, screens, window shades, and architects' fees.

The building operations were started in May, 1916, and the hospital was opened in July, 1917.

VARIOUS FORMS OF HOSPITAL INSURANCE

More Important Than It Is Generally Thought—It Is Well To Receive Expert Advice in Regard to Rates and Protection

By L. R. CURTIS, St. Luke's Hospital, Chicago

INSURANCE in its various forms is worthy of more consideration than it usually receives in hospital administration. In any discussion of this subject, we may assume as a foregone conclusion that it is wise, provided the cost is within reason, to purchase protection from all of the various risks which can not be eliminated.

Unless the person handling insurance matters is well versed in the matter of rates and forms, it would in nearly every case be profitable to have an expert make an analysis of the line with special regard to determining whether the rates are the lowest obtainable and if the degree of protection offered is adequate. Reduced rates may often be secured by making inexpensive changes.

The various forms of insurance applicable to hospitals may be listed as follows: fire insurance on buildings; fire insurance on contents; fire insurance on rents; general liability, covering personal damages to all persons not covered by the employees' compensation provisions; employees' compensation; elevator insurance; steam-boiler insurance; malpractice insurance, covering damage suits by patients; pay-roll insurance, covering theft of pay-roll money; burglary insurance, covering theft of money or valuable property belonging to the hospital or held in trust for patients; and fidelity bonds, covering losses due to employees. The foregoing list is not complete, but includes all the forms of insurance which are especially applicable to hospital risks.

Fire insurance on buildings and their contents is universal, but it is doubtful whether many institutions have increased their lines to meet the advanced cost of replacement under the present scale of prices. It is proper also that the property of resident officers, physicians, and nurses should be covered by the policies.

Insurance on rents is not so common, but in cases where income from rented property is used in the support of an institution, the same reason applies for covering income as for protecting the capital investment.

Employers' liability, general liability, elevator,

and steam-boiler insurance may be classed as indispensable. No institution can afford to carry these risks. In addition to protection from loss in damages, there is a distinct value in the inspections and advice relative to reducing accidents to a minimum. The loss from damage suits is not confined to damage paid, but lawyers' fees, court costs, and incidentals are a considerable item, even if the verdict is favorable. Many cases are abandoned when the claimants find they are opposed by an insurance company.

In regard to the malpractice risk, it may be said that every hospital, however well-conducted, is open to claims and suits for damages by patients. Some of these may have a more or less substantial basis for claims, others are trivial, but the greater proportion have no just cause for a claim. Often suits are instituted with the belief that the institution, having taken into account the uncertainty as to the verdict, the expense of litigation, and the resulting disagreeable publicity given to exaggerated statements by the claimant, will make some sort of a settlement. Insurance tends to reduce the number of suits. I have heard it argued that insurance of this kind would have a tendency to make the hospital attachés less careful and conscientious in their work, but I am satisfied that this is not true in hospitals of the better class.

Pay-roll insurance is relatively new. It covers funds from the time the money is taken from the bank until it is distributed, usually with the reservation that it shall be distributed the same day it is drawn. With the very numerous robberies during the past few years in the larger cities, the protection afforded is well worth while.

Burglary, or robber insurance, is desirable only if considerable amounts of money or valuables are kept on the premises. It is usually written to include money in transit to the bank.

Fidelity bonds are a very necessary form of precaution. Nearly all corporations require that all employees in positions of trust, or who handle or have access to money, be bonded. It does not reflect on the person bonded, and it not only secures the employer against loss, but I believe that it acts as a deterrent against temptation.

If the hospital owns and operates an ambulance, insurance of this class should be carried in addition to the others mentioned.

THE ANESTHETIST ON THE HOSPITAL STAFF

Specially Trained Anesthetists Save Life, Facilitate the Work of the Surgeon, and Help to Establish the Hospital's Reputation—Anesthesia a Branch of Medicine Too Long Overlooked

By ISABELLA C. HERB, M.D., Chief Anesthetist, Presbyterian Hospital; Instructor in Anesthetics, Rush Medical College, Chicago

IN the commercial world in every vocation and every line of industry in which there is danger to life, the state law compels safety devices or the posting of danger signals to warn employees. The fact cannot be gainsaid that a large proportion of the anesthetic deaths are preventable, and yet what are the precautions generally taken to safeguard the patient during narcosis? The saving of life in this respect demands the attention of the entire medical profession. The anesthetist who kills the patient through overdosage or the improper selection of the anesthetic can no longer hide behind "heart disease" or "the status lymphaticus," and, in common vernacular, "get away with it," at least not with those who are prone to analyze results or cause and effect.

The slogan to be adopted, the safety device, is a single word, "education." Every medical college should give theoretical and practical instruction in anesthetics, and this course should be made compulsory, before a student is admitted for graduation. Fortified with such instruction, the graduate who serves an internship in a well-regulated hospital with a qualified anesthetist on its staff will be a distinct asset to the community, regardless of the branch of medicine he may elect to practice. Nothing can improve the status of the qualified anesthetist more than the education of physicians generally, in the subject of anesthesia. Gatch says, "Any art must suffer if it lacks an intelligent and appreciative clientele. By the extent to which anesthesia as a specialty fails to command the support of the medical profession, is to be measured the failure of the latter to appreciate the advantages of good anesthesia."

The public is surely learning the gravity of anesthesia in both its immediate and remote effects, as is evidenced by the fact that patients frequently ask, "Who is going to give me the anesthetic?" or engage the anesthetist in the same manner as they engage the surgeon. When people generally understand that the life of the patient often rests with the anesthetist, better anesthetic service will be demanded, and the administration of anesthet-

tics will assume the importance and dignity it deserves. Fortunately the time is past when the most inefficient person present is chosen to administer the anesthetic. W. W. Keen, a surgeon of wide experience and international fame, has pertinently said, "Next to the surgeon and even before his first assistant stands the anesthetist holding the scales of life and death."

Combine experience with an observant, analytical mentality and a clear judgment, and the result is an efficient person whose opinion can be respected. The anesthetist who has these qualifications and who also possesses tact, sympathy, and a reassuring personality is a definite asset, not only to the surgical department, but to the hospital that claims him as a member of its staff. The influence that such an individual exerts is unconsciously felt throughout the institution. It is passed from physicians to nurses, from nurses to patients, and from patients to friends, and the result is that a confidence is established before the patient goes to the operation room. Naturally the fear of the anesthetic is thereby lessened if not altogether abolished.

THE RELATION OF THE ANESTHETIST TO THE SURGEON

Perfect confidence, understanding, and harmony should exist between the surgeon and anesthetist or else the best interests of the patient may be sacrificed. In all surgical risks it is a wise procedure for the surgeon and anesthetist to consider the case together. When the surgeon has explained the surgical procedures he desires to institute, the physical condition of the patient and operative requirements can be discussed and the selection of the anesthetic and the method of its administration determined. Of course this procedure can be followed only when qualified, experienced anesthetists are employed.

What are the advantages to the surgeon in working with the specialist in anesthesia? The surgeon who has confidence in the judgment and ability of the anesthetist is relieved of all anxiety and worry as to the condition of the patient and his mind is free to engage in the surgical problem at hand. He is aware that the anesthetist is ever on the lookout for changes in respiration and circulation and will warn him of impending danger or approaching shock. The capable anesthetist, knowing the exact condition of the patient, can guide the surgeon intelligently as to the advisability of added operative procedures. This so-called "team-work" is responsible for better surgery and safer anesthesia, both immediate and remote. Furthermore, the patient is made to feel that the surgeon has left nothing undone which will contribute to the success of the operation. It has been my experience that those surgeons who are most familiar with anesthetics, their action and the different methods of administration, are the ones who are most willing to consult with or be influenced by the qualified anesthetist. It is only just to assume that the physician who devotes all his time and study to this particular field of medicine should be better informed than the surgeon whose studies are along the line of surgery; consequently a qualified anesthetist is primarily a consultant.

THE RELATION OF THE ANESTHETIST TO THE INTERNS

The value of supervision of the anesthetics given by the inexperienced interns can not be overestimated. He learns the method of handling patients with tact and courtesy and of allaying their fears and apprehensions, thus obtaining their confidence and assurance in his ability. The instruction of interns should be directed toward the administration of anesthetics in such a manner that the occurrence of complications due directly to the anesthetic may be foreseen and prevented.

The beginner in the administration of anesthetics should be supervised in the same strict manner that he is in other branches of medicine and surgery. His college course does not fit him for anesthetic work any more than it fits him to perform operations or assume the care of a severely sick medical patient without supervision. The surgeon who relegates the administration of the anesthetic to the untrained junior intern without supervision is morally responsible for the outcome. It is just as reasonable to turn over to him the surgical patient and allow him to operate without guidance and expect him to do satisfactory work.

Interns enter hospitals in order that they may be taught to put properly in practice, under experienced supervision, what they have been taught theoretically in college. Just why surgeons should expect these men to be competent to administer anesthetics is as incomprehensible as that they are willing to risk the patient's life in their hands. Surgeons, in general, are too prone to let the administration of anesthetics be a matter of unthinking routine. Ignorance is not bliss when life is at stake. Danger must be recognized before it can be eliminated, and the proper instruction of interns is not possible without qualified anesthetists on the staff. The proper teaching of anesthetics makes the administrator thoughtful, attentive, and wary. It gives him confidence and wisdom under trying circum-

stances as well as a desire to seek more light the more he finds. The wish to acquire more knowledge and the finding of it brings joy in one's work and abolishes completely all thought of monotony or drudgery. The most successful teacher is he who can arouse the greatest amount of interest in the subject at hand. Flagg says, "The proper administration of an anesthetic is more than a mere mechanical performance; it is an art. To give an anesthetic is one thing, to practice the art of anesthesia is another." At the close of every intern's service he should be master of the principles of anesthesia and the different methods of producing and maintaining narcosis with a minimum of risk and a maximum of competence.

THE RELATION OF THE ANESTHETIST TO THE PATIENT

The relation that the anesthetist bears to the patient is analogous to that of the surgeon. The life or future well-being of the individual may be jeopardized through the carelessness or ignorance of the one or the other.

After the anesthetist is acquainted with the physical and mental condition of the patient and the operative requirements and preliminary preparation, the anesthetic to be given and the method of its administration can be determined. The attitude of the anesthetist toward the patient should be gentle and sympathetic. Mystery is disconcerting to most people; consequently it is the better part of discretion to inform them why certain details, such as the position on the operating table or covering the eyes, are necessary. One of the greatest assets an anesthetist can have is the ability to gain the confidence of his patients.

THE OBLIGATION OF THE ANESTHETIST TO THE HOSPITAL

The same confidence which exists between the surgeon and the anesthetist should exist between the hospital management and the anesthetist. It is the duty of the anesthetist to consider that it is a part of his work to help maintain a high standard reputation for the hospital and to promote its interests by avoiding undue waste. It is desirable that he administer the anesthetic to all patients whose general condition makes the administration especially hazardous, as a large majority of these patients can be safely carried through a properly conducted anesthesia.

Only established methods of anesthesia should be employed or allowed. All experimental work should be confined to the lower animals, and then sufficient time must be allowed to elapse for secondary effects to manifest themselves before the anesthetic or method is used in the hospital.

The report of the committee on anesthesia of the American Medical Association (1912) was to the effect that, "Every hospital, certainly every large hospital, should have as a regular member of its staff an attending anesthetist whose authority in his special branch should be as complete as that of the attending surgeons in theirs."

THE RELATION OF THE HOSPITAL TO THE ANESTHETIST

The hospital that has not a qualified anesthetist on its staff is a menace to the best interests of the prospective patient and attending surgeon. What is meant by a qualified anesthetist? The qualified anesthetist is one who is capable of making a physical examination of the patient, who can interpret laboratory findings, who is familiar with operative requirements and able to weigh the evidence and select the most suitable anesthetic and method for its administration for the particular patient under consideration. These qualifications require not only a medical education but special training in the theory and practice of anesthesia as complete as is demanded in the field of surgery or its correlated specialties. The tyro who gives an occasional anesthetic, or the medical man who gives a few anesthetics to help pay expenses, should not be considered qualified. It may be urged that I have made the requirements too high and I will reply by asking if less is demanded of the physician who specializes in other branches of medicine? And yet, with the exception of surgery, there is no part of medicine the practice of which is capable of destroying life so quickly as is the administration of anesthetics.

All matters pertaining to the department of anesthesia should be referred to the anesthetist in charge. He should be privileged to purchase, at the hospital's expense, such apparatus as is required for successful work. He should also be allowed the brand of anesthetic that according to his experience and investigation is the purest and consequently the safest.

I can not refrain from making a plea for the unfortunate poor in our county institutions. The hospital management should not allow these people to be used by a set of faddists to demonstrate some new agent or method of anesthesia or to revive a method which has been abandoned because of high mortality or evil secondary effects. The economic and social value of a charity patient may be greater than that of the private-room millionaire.

REMUNERATION

For years the professional anesthetist has been recognized in England, but it has only been recently that the United States has developed this

specialty, although the first anesthetics were given here and the greatest advancement in this science must be credited to American physicians.

In order that medical men and women shall devote their time and study to anesthesia, the public as well as the medical profession must be taught that safety lies in having the anesthetic well administered and that such expert service must be properly recompensed according to the skill required and the responsibility assumed. It is evident that the medical profession itself does not sufficiently appreciate this point.

Unless the anesthetist is a full-time teacher with a regular stipulated compensation his services should be paid for by the patient, as is the operation fee. This relieves the hospital of the responsibility and the extra expense of maintaining an anesthetist. This arrangement at once changes the whole complexion of the situation. The anesthetist assumes a personality which he did not before possess, for he has been only a part of the hospital machinery and looked upon by the surgeon and patient very much as the surgical nurse, orderly, or other operating-room appurtenances are. Patients are not only willing but glad to pay the extra fee if the occasion for it is properly explained to them. The fee to be charged must rest upon the financial circumstances of the patient and the difficulties of the anesthesia. The bills should be sent directly to the patient from the anesthetist and not through the surgeon or the hospital. This latter point is important to the anesthetist, as it establishes an acquaintance with the patient and his friends, and, if the anesthesia has been satisfactory, they will think of him for other operations.

A CHILDREN'S DISPENSARY ORGANIZED ON THE BASIS OF APPOINTMENTS FOR PATIENTS

History-Taking by Lay Assistants Proves Satisfactory—Substitute Procedure in Absence of Medical Assistants—Routine Investigation of Diets of First Importance in Efficient Work

By EDWARDS A. PARK, M.D., and Co-Workers, Johns Hopkins University, Baltimore*

INTRODUCTION

EARLY in 1918, M. Berryer, Minister of the Interior of the Belgian Government, working in conjunction with the Commission of the American Red Cross for Belgium, determined on the establishment in Le Havre of a medical organization which should care for the children and pregnant women of the twenty thousand or more Belgian refugees gathered there. He secured a theater, named "La Salle Franklin", after Benjamin Franklin, and assigned the organization of the obstetrical work to a Belgian staff. The task of organizing and conducting the relief work for the Belgian children he entrusted to the American Red Cross[1].

The peace-time population of Le Havre of one hundred and fifty thousand had been swollen by an influx of refugees and the families of working men and soldiers to an unknown figure, generally estimated at two hundred and twenty thousand. This surplus population, approximating seventy thousand, had been forced to find lodgings in a city already filled to its normal capacity, for not a single new building had been erected anywhere. The crowding in the poorer parts of the city was so extreme that whole familes lived in single rooms. The rents which the refugees and other newcomers were obliged to pay were more than three times their pre-war value. The prices of food, coal (which was rationed), clothes, and household supplies had at least tripled. The great majority of the doctors of Le Havre had been mobilized; the few who remained were for the most part occupied with clientèles able to pay. Diseases of various kinds were prevalent, chief among them tuberculosis; and a whole variety of minor ailments, the result of scarcity of food, unhygienic conditions, vermin, and neglect, were common. The suffering among the French refugees and the poorer classes of the fixed population of the city was even greater than among the Belgian refugees, whose interests were ably looked after by their government.

In the presence of the stimulus of such need for medical aid the new organization grew rapidly. A children's dispensary was created. The relief work was extended to the French. A barrack hospital was built. A training school for French and Belgian nurses' aids was established. The systematic visitation of all new-born infants and the supervision of their health for the period of one year was undertaken in the most crowded and oldest quarter of Le Havre, the St. François quar-

*Written in collaboration with Dr. Alma Rothholz, Dr. Ruth Guy, Dr. Rena Crawford, Miss Ethel Damon, Miss Mabel Wilcox, and Miss Ruth Washburn, of the Johns Hopkins University, Baltimore.

1. Mr. Ernest Bicknell was commissioner, Mr. John van Schaick deputy commissioner, and Dr. Mason Knox, Jr., medical advisor to the commission when the work in Le Havre was inaugurated. Dr. E. A. Park was medical director, and charged with the organization of the work.

ter. All conditions were propitious for the freest development. The staff[2] of the new organization had no extraneous duties. The Belgian Commission was liberal in its financial support and never attempted to interfere with the development of the new organization.

When the Commission of the American Red Cross for Belgium ceased its activities in Le Havre on March 10, 1919, the private charitable organizations of the city interested in infant welfare united under the leadership of Dr. Gibert and, joined by the prefecture and the municipal government, raised the necessary funds and made the organization a permanent institution.

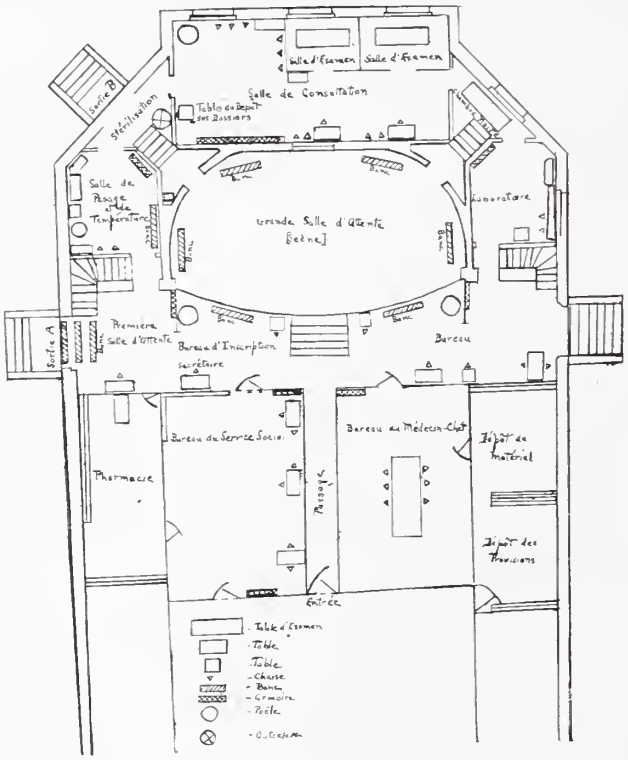


Fig. 1. Floor plan of stage and theater converted into dispensary.

Of the different branches of the organization the dispensary was the most important; it was the pivot around which the others turned. Its great success was due in large part to its organization and methods of administration, which differed in several respects from the conventional organization and methods of administration of dispensaries. The following pages, taken from the report submitted to the commission for Belgium in regard to the medical work conducted in Le Havre are limited to the discussion of the organization and methods employed in the dispensary. It is believed that certain dispensary methods used in America could be altered and that certain of the features which characterized the American Red Cross dispensary in Le Havre could be adopted to the advantage of the patients. In particular, it is thought that dispensaries can be operated on the appointment system without difficulty, and that lay assistants may be used successfully for case history-taking in children's clinics, and, finally, that there is no way in which a children's dispensary can be made to perform so useful a service to the community as by systematically investigating the diet in each case as a routine procedure, and advising in regard to it from both the medical and economic standpoints.

THE ARRANGEMENT OF THE DISPENSARY

The dispensary occupied the northern end of the theater of La Salle Franklin, the stage, and surrounding dressing rooms. The use to which the allotted space was put is indicated in the accompanying floor plan (Fig. 1).

The patient entered the dispensary by *passage*, turned to the left to the clerk's table (*secrétaire*), or, if the clerk was occupied, waited on *banc* at left of stairs to stage. When the registration was completed, he proceeded to *première salle d'attente* (the first waiting room), and sat on one of the benches until called to enter the *salle de pesage et de température* (the weighing and temperature room). The chart was sent by the clerk to the weighing and temperature room, preceding him there. When it became the turn of the patient to have weight and temperature taken the nurses' aid summoned him from the first waiting room to the weighing and temperature room. The record of the temperature and weight was written in ink directly upon the chart on the left-hand side of the page by the nurses' aid taking them. From the weighing and temperature room the patient was sent via the *salle de stérilisation* (sterilization room) to one of the benches in the *grande salle d'attente* (main waiting room), where he waited until summoned into *salle de consultation* (consultation room). It will be observed that the benches in the main waiting room were placed four meters (about thirteen feet) apart in order to limit to the greatest extent possible the contact of children waiting there for examination. The chart of the patient was carried by one of the nurses' aids from the weighing and temperature room to the consultation room and placed upon the chart table (*dépôt des dossiers*) situated there. When the patient's turn for examination came, he was summoned from the main waiting room into the consultation room by one of the aids working under the doctor's direction in the consultation room. When the examination was finished, the patient made his exit through the sterilization room and the main waiting room to the desk of the clerk, who gave the appointment for the next visit, and saw

2. The Commission of the American Red Cross for Belgium obtained the greater part of its staff of doctors and nurses from the children's bureau of the American Red Cross in Paris.

to it that any prescriptions calling for drugs or food, or any orders for assistance from the nursing or social service department, were referred to the proper persons. If the patient was a new case, the nurses' aid took the history at one of the tables situated on either side of the front stairway leading to the stage. There were two additional examining rooms situated in one of the galleries of the theater which are not indicated in the floor plan.

We point out merely that the arrangement of a series of small rooms (the dressing rooms) around a central waiting room (the stage) was excellent in principle, and that the shallow rooms with high double windows made the best kind of examining rooms. It will be seen that it was possible to establish a progression, i. e., so to arrange space as to enable the patients to move steadily from one point to another during their passage from the *bureau d'inscription* through the weight and temperature rooms to the consultation room, where the examination by the doctors took place, without the necessity of retracing their steps[3].

A FULL-TIME DISPENSARY

The dispensary with its staff in attendance was open for the examination and treatment of children from 9 a. m. to 5 p. m. each day with the exception of Saturday afternoon, Sunday, and the more important holidays. Inasmuch as the staff lived in the dispensary building, it was possible to keep the doors of the latter always open for the reception of emergency cases. The dispensary was thus a full-time dispensary. It rendered the special service of providing for the poor, who were denied recourse to private physicians, a place in which medical assistance could be had at all times and under all circumstances in case of need.

AN INTERCHANGEABLE FORM OF CHART FOR HOSPITAL AND DISPENSARY

A barrack hospital existed in connection with the dispensary. Accordingly, a form of chart was chosen which could be used interchangeably in hospital and dispensary. It was copied from the interchangeable chart used in the children's service of the Johns Hopkins Hospital, Baltimore. The complete chart consisted of a paper folder of standard typewriting size, insert sheets, sheets for social service reports, and sheets for the graphic records of temperature and weight.

The folder bore at the top of the first page a heading consisting of the name of the institution and of the Belgian Ministry under whose auspices the work was conducted, and immediately below this a printed form for the data universally required in the case of patients applying for hospital or dispensary aid: the name, age, date of first application, names and address of parents, dispensary number, etc. Except for the heading and printed form at the top of the folder just described, and a vertical black line forming a

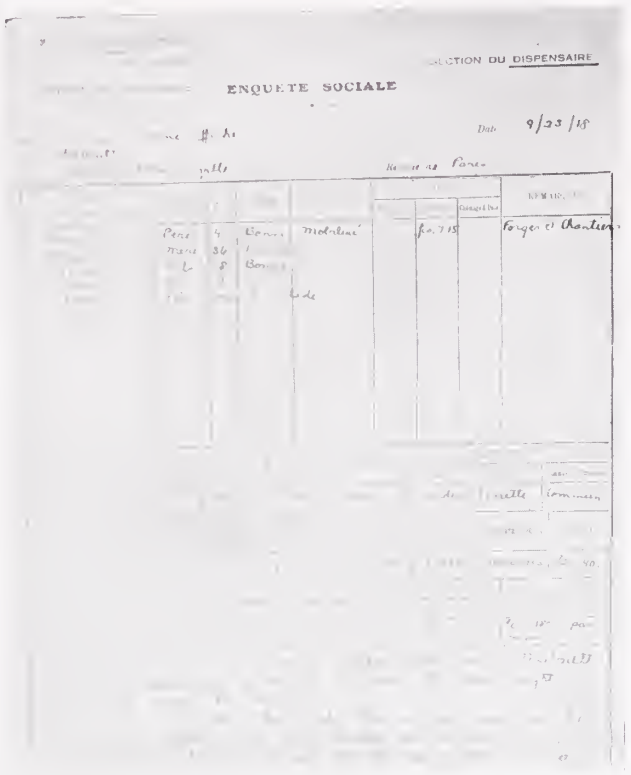


Fig. 2. Social service sheet showing form.

margin 3 cm. in width along the inner side of each page, both folder and insert sheet were blank. The object in having a folder was to provide something which would keep together the various single sheets above mentioned, and at the same time hold any correspondence or miscellaneous data pertaining to the case. The object of the insert sheet was to supplement the folder when the four pages of the latter had become completely filled. The sheet for the social service records (Fig. 2), colored yellow, was covered on one side by a printed form for social service data, but the reverse side was left blank for notes. Accompanying it were blank yellow sheets for the continuation of the social service observations. When a dispensary patient entered the hospital his dispensary chart was transferred at the same time, and the sheets for the graphic record of temperature and weight added. The usual special sheets for nurses' notes and for medication, and the results of laboratory analysis, were not provided for reasons of economy. The folder containing the various sheets described was always protected when placed in the file by

3. This statement is not strictly true, because at one point the stairway leading from the sterilization room to the main waiting room had to serve as both entrance and exit.

a stiff cardboard folder which bore the patient's number.

Although the chart used in our hospital and dispensary has been described in some detail, its exact nature is of little importance. The essential point is that the chart was such that it followed the patient from dispensary to hospital,

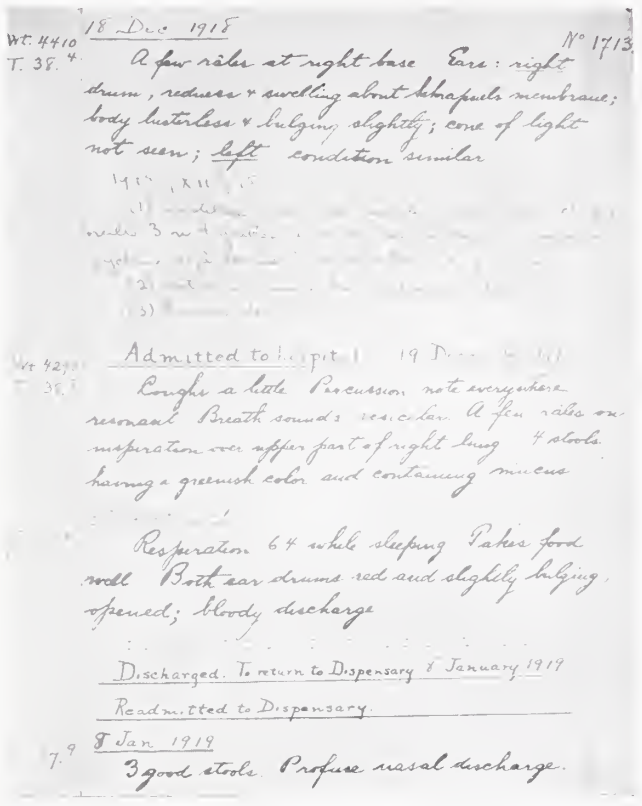

Wt. 44 10
T. 38. 4
18 Dec 1918
N° 1713
A few rales at right base Ears: right drum, redness + swelling about Mucous membrane; body lusterless + bulging, slightly; cone of light not seen; left condition similar
Admitted to Hospit 19 D
Cough a little Percussion note everywhere resonant Breath sounds vesicular A few rales on inspiration over upper part of right lung 4 stools having a greenish color and containing mucus
Respiration 64 while sleeping Takes food well Both ear drums red and slightly bulging, opened; bloody discharge
Discharged. To return to Dispensary 8 January 1919
Readmitted to Dispensary.
8 Jan 1919
3 good stools Profuse nasal discharge.

Fig. 3. Page of chart showing use in both dispensary and hospital. The first item is the dispensary note; the second, carbon record of instructions to patients, with date of next appointment; the third, transference to hospital; the fourth, hospital note; the fifth, transference to dispensary; and the sixth, dispensary note.

and from hospital to dispensary, thus preserving a continuous and complete record of the case. There was no need to transfer the dispensary record to the hospital chart when a dispensary patient entered the hospital, or to transfer the hospital record to the dispensary chart when a patient discharged from the hospital was readmitted to the dispensary service. Thus the duplication of work always necessitated when hospital and dispensary have different forms of charts was avoided. (Fig. 3.)

THE APPOINTMENT SYSTEM APPLIED TO THE DISPENSARY

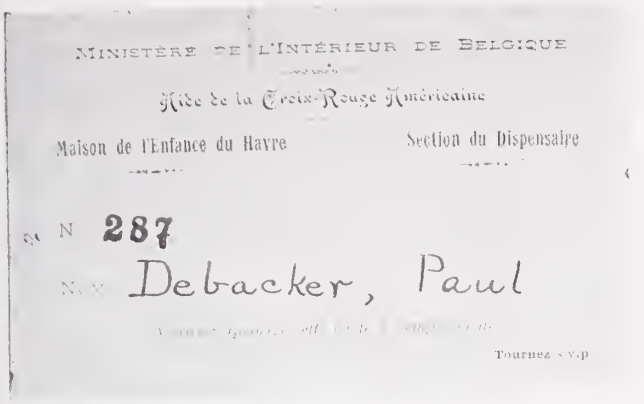
Children brought to the dispensary during its period of regular session were either seen by the doctor at once, or given definite appointments for the same day or for some subsequent day; in other words, patients applying for treatment were received exactly as they would have been by a busy private physician. The assignment of hours for the appointments was in charge of one person, the dispensary clerk, who kept the daily register and acted in the capacity of a secretary in the office practice of a private physician. Her desk was so placed that patients entering the dispensary naturally passed before it. On her desk lay the calendar containing the list of appointments for the day and for succeeding days.

The appointment system as employed in our dispensary was carried out in the following manner: A child applying to the admitting clerk for examination was given an appointment immediately if one of the ensuing periods on a doctor's schedule was free. If such a period was not free the action of the dispensary clerk was governed by the urgency of the case. If immediate examination was necessary because of the illness of the child, or the inability of the parent to wait or to return, or for some other reason, the child was registered immediately, and then sandwiched in between two cases having regular appointments. If the case was not urgent, the appointment lists were consulted to determine the free periods, and the parent allowed to select the one most convenient. A doctor was always at the disposal of the dispensary clerk to determine the urgency of the case from the medical standpoint.

After the consultation the date for reappointment was, of course, always made by the doctor, who alone was conversant with the patient's needs, and was communicated by him in writing to the clerk, at the bottom of the treatment slip (Fig. 3 second item). Only the date for reappointment, however, was arranged by the doctor. The hour was always determined by the dispensary clerk after consultation with the patient and examination of the appointment lists.

When the dispensary clerk had fixed upon the appointment hour most suitable to the patient, whether the patient was a new case or an old one, she entered it, with the date, on the reverse side of the dispensary card which the patient was to take away with him (Figs. 4 and 5), and then wrote the patient's name and number under the corresponding date on the appointment calendar (see table showing list of appointments for February 7, 1919).

Appointments were made to fall due on the hour and the half-hour. If the case was a new one a half-hour was regularly allotted to it, and ordinarily no other assignment was made for that half-hour on the doctor's schedule. If, however, the child had been seen previously, particularly if it was thought that little time would be required for examination and treatment (e. g., feeding cases returning frequently), other old cases were assigned to the same half-hour period.


MINISTÈRE DE L'INTÉRIEUR DE BELGIQUE

Aide de la Croix-Rouge Américaine

Maison de l'Enfance du Havre — Section du Dispensaire

N 287

Debacker, Paul

Tournez s.v.p

Fig. 4. Front of dispensary card kept by the patient.

Ordinarily no appointments were made on the doctor's schedule between 11 a. m. and 1 p. m., or between 4 p. m. and 5 p. m., in order that there might be some time free for emergency cases. Thus it was possible to examine the great majority of new patients on the day of application.

LIST OF APPOINTMENTS FOR FEBRUARY 7, 1919.

RENDEZVOUS

le 7 Fevrier 1919.

A.M.

9:00 Saunier 148*; Van der Meutter 567; Gonidec 2081*; De Stryker 552*; Bloc 1589*; Barriaux 2026; Le Gay 98; Delavigne 2011*; Kooy 857; Cosse 187*.
9:30 Guyot 1396; Gouriou 183*; Fouquier 1981; Caluwé 189*.
10:00 Leen (new); Chapelain 1310 et 1311* (twins; Leprovost 785*, to be weighed before and after nursing.
10:30 Legris 1904; DeMaker 1657; Van der Kruyssen III.
11:00 De Groote 1834; Dubois 897; Osmont 1910, 1911, 1912.
11:30 Lachèvre 49; Fauger 752; Lafont 1046; Rose 33.

P. M.

2:00 Barray et Gontier (new); Guillaume 300; Hymans 803; Libert 571*.
2:30 Praet 253; Robience 998*; Brassinc 55.
3:00 Besnard 523; Van Cassel 84; De Gras (new).
3:30 Fontaine 75; Labbeke 1207; Bremer 350*.
4:00 Vallé 1212; Morin 1273; Pitte 1194; James 1252.
4:30 Fourmanoit 263; Stuekkens 1127.

*Regulation nourishment.

THE ADVANTAGES OF THE APPOINTMENT SYSTEM

The advantages of the appointment system are so obvious as to require little comment. Perhaps the most important result from it in our dispensary was the saving of the parent's time and, therefore, of his money. The day's wage is of as much importance to the dispensary patient as the day's income to the dispensary doctor; its steady flow is often a matter of vital importance. Yet the dispensary system generally in use, according to which the patients are obliged to assemble before 9 a. m. or 2 p. m., and then to wait often the whole morning or afternoon, implies that the time of the dispensary patient is of so little value that it may be almost disregarded. The truth is that the modern dispensary is conducted, primarily, with a view to the convenience of the dispensary physician, on the principle that it is better for forty patients seated on the benches to lose sixty hours' time, than for the doctors to be subjected to the possibility of losing one-half hour's time. As everyone who has worked in children's dispensaries knows, many a parent who finds himself obliged to sacrifice his day's wage, or, if he works at night, his day's sleep, will not bring his child to the dispensary. Yet such a parent will bring his child to meet the doctor on a day and hour found to be mutually convenient.

In fact, as applied to the dispensary, the appointment system not only causes no loss of time to the doctor, but brings about the very best utilization of his time by producing a more even distribution of patients throughout the dispensary day and week. The avalanches of patients which descend on Mondays, on the days following holidays, or the first pleasant day after a period of bad weather, can, to a great extent, be anticipated, or held and distributed. The doctor thus avoids the frequent necessity of abandoning all careful consideration of his cases in an effort to get rid of them as rapidly as possible. Furthermore, the assembling of crowds of children is obviated, exposure to contagious diseases minimized, and noise and confusion, the two attributes of children's dispensaries, greatly reduced.

From what has been said, it must not be thought that the appointment system always worked perfectly in our dispensary and at once freed us from all the ills of the old system. Waiting and crowding occurred, but, relatively speaking, to a limited extent. Sometimes, when groups of patients collected, the fault was with the patients who had come late; almost always, however, it lay with the doctors who were late themselves, or fell behind their schedule as a result of some emergency or for other reasons. When the system worked perfectly there were not more than six patients in the waiting room at any one time during the day. On several occasions visitors have remarked, "You have closed?" when, in reality, more than fifty patients were being seen in the course of the day.

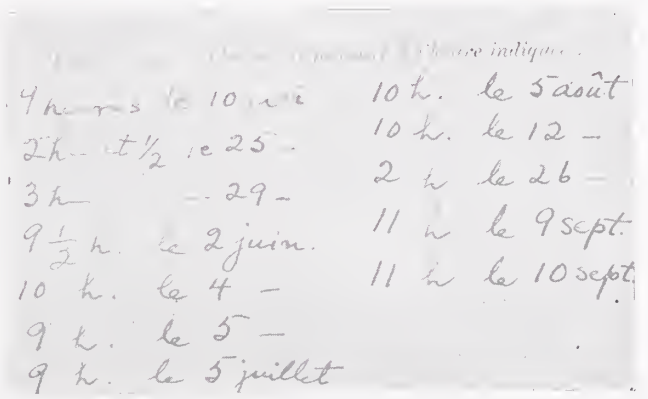

4 h. le 10 —
2 h. et ½ le 25 —
3 h. — 29 —
9 ½ h. le 2 juin.
10 h. le 4 —
9 h. le 5 —
9 h. le 5 juillet
10 h. le 5 août
10 h. le 12 —
2 h. le 26 —
11 h. le 9 sept.
11 h. le 10 sept.

Fig. 5. Back of dispensary card kept by the patient, showing date and hour of appointment.

If the dispensary patient paid a fee to the dispensary doctor, as the private patient pays a fee to his physician, in other words, if the dispensary

doctor had been compelled by his own selfish interests to recognize the convenience and economic necessities of his patients, all dispensaries would have been operated on the appointment plan long ago. There is no reason that a dispensary created for the benefit of the poor should not be conducted from every point of view to their advantage.

CASE HISTORY-TAKING INTRUSTED TO LAY ASSISTANTS

With the growth of the dispensary and the development of medical work of other kinds in Le Havre, it became impossible for the doctors to continue to take detailed case histories of the patients coming to the dispensary. The work was, therefore, turned over to entirely untrained assistants, young Belgian and French women who were taking a three months' course of study to become nurses' aids. A plan for history-taking (in next installment of this article) was compiled, which contained illustrative questions and examples designed to show the form of statement and arrangement in which the facts should be recorded, with some additional special advice in regard to the elicitation of the facts in so-called "feeding cases." It was made as simple as possible and was limited to those subjects which it was thought a lay assistant was capable of investigating. The aids were required to study it until they were able to ask its questions from memory and were instructed when they recorded the facts to arrange them under the general headings of the history plan, and to adhere to the form of statement and the sequence observed in the illustrative examples.

If carefully prepared case histories of a children's clinic are examined, it will be found that a considerable proportion of each is composed of information which an intelligent lay assistant would have been able to ascertain if she had been properly directed. As a matter of fact, a surprisingly large part of the case history of a child is composed of the most ordinary statistics essentially of a non-medical nature which a lay helper can determine almost, if not quite, as well as a physician. Such, for example, are the ages of the parents, their occupation, the births of living and stillborn children, and miscarriages, enumerated in the order of occurrence, the weight of the child at different periods, the age at which sitting alone, standing, walking, talking, the eruption of the teeth, and the like occurred, and, in addition, the various feedings and régimes from birth to the date of presentation at the dispensary. Another considerable portion of the case history within the power of the lay assistant to investigate is concerned with the occurrence, or non-occurrence, of certain symptom groups indicative of well-known diseases or pathological conditions which it is customary to attempt to exclude as a matter of routine. Such, for example, are the chronic cough, hemoptysis, night sweats, fever, loss of appetite, flesh, and strength, suggestive of tuberculosis; breathing with the mouth open, snoring, attacks of otitis media, suggestive of adenoids; cyanosis, difficulty in respiration, convulsions, inability to nurse during the first few days or weeks after birth, suggestive of brain defect, injury, or hemorrhage, and certain other conditions; snuffles, blood-stained nasal discharge, peeling of palms and soles, eruption during the first two months, suggestive of congenital syphilis. Another portion of the case history which the lay assistant may be able to investigate with success relates to the past illnesses of the patient. The lay assistant cannot, to be sure, make discriminating judgments in regard to past illnesses —for example, that the disease which the mother called measles was in reality scarlet fever; she can furnish, however, the list of the past illnesses, with dates, which the mother thinks the child has had. There are, of course, certain parts of the case history which a lay assistant can not hope to investigate successfully; for example, past illnesses of indefinite character, or the present illness, which may be any one of a great number of diseases with most diverse symptomatologies, such as no history form could possibly anticipate. So long as the lay assistant is dependent on a form, she is naturally confined by the limitations of the form, and, therefore, to the investigation of those portions of the history which may be termed "fixed." In the case of children, however, the fixed portions frequently compose 80 or 90 per cent of the total. Particularly in the case of babies brought to dispensaries on account of indigestion, or for regulation of the diet (and they represent a large proportion of the cases in children's dispensaries), the untrained assistant can often obtain all the information which it is necessary to know. In general, the younger the patient the simpler the history, and the greater the proportion which the untrained assistant can elicit.

The histories taken by the nurses' aids with the aid of the history plan used in our dispensary were remarkably serviceable. They always supplied the doctor with the statistical foundation of the history; in a considerable proportion of cases they furnished him with all the essential facts. When they were incomplete he was usually able to complete them with a few well-directed questions. The interpretation of the information contained in them may not always have been correct —the peeling of the palms and soles, reported under symptoms suggestive of congenital syphilis,

for instance, may have been only a part of a physiological desquamation—there may have been important omissions. The suggestion, however, was there, and the doctor at liberty to investigate further if he considered it necessary.

As compared with the case histories taken by doctors themselves, or by medical students, the case histories taken by nurses' aids had certain superiorities. They possessed an absolutely uniform tabulated arrangement which made immediate reference to any portion always possible and which permitted a comprehension of the subject-matter without the necessity of reading every word. They were free from the irrelevant matter and misleading subjective interpretation so often found in case histories of medical students. They provided detailed information on certain important subjects, notably the diet, frequently omitted altogether. There was agreement among the doctors of our staff that for *practical purposes* the histories of the aids taken with the aid of the history plan were superior to the case histories taken by medical students allowed to follow their own judgment. The untrained assistant compensated for her lack of specialized knowledge by fidelity to a prescribed routine.

Naturally, when regarded from the standpoint of scientifically accurate records of disease, the case histories taken by the aids were miserable failures, the more inadequate the further the case was removed from the ordinary. We do not recommend history-taking by lay assistants as a means of obtaining case records to be used for scientific purposes, but as a substitute procedure when sufficient trained assistance is unavailable. Our experience demonstrates that for case history-taking in children's clinics skilled labor can be successfully replaced in large part by unskilled labor.

In the foregoing paragraphs we have discussed only what beginners were able to do. After one of the nurses' aids had taken twenty histories she was transferred to another field. We have not had sufficient experience to enable us to say what degree of proficiency might be attained by a lay assistant who took medical histories over a long period of time. We venture the opinion, however, that an intelligent person without medical education or experience could acquire enough of both in a comparatively short time to ensure complete and perfectly satisfactory histories even in difficult cases. We believe that the most satisfactory arrangement in a children's dispensary not designed to be a place of instruction for students would be to place history-taking in the hands of lay assistants employed solely for that purpose.

METHOD OF RECORDING DIRECTIONS GIVEN TO THE PATIENT

As in other dispensaries, children making their first visit were undressed and completely examined. After the first visit the examinations were complete or partial as the conditions seemed to demand. The method of recording the physical examinations in the charts was the usual one. The method of recording the directions given to the patient in regard to treatment, however, was not usual, and, though exceedingly simple, has not been used elsewhere, so far as we are aware.

At the very beginning of our work at La Salle Franklin it was determined to give all the direc-

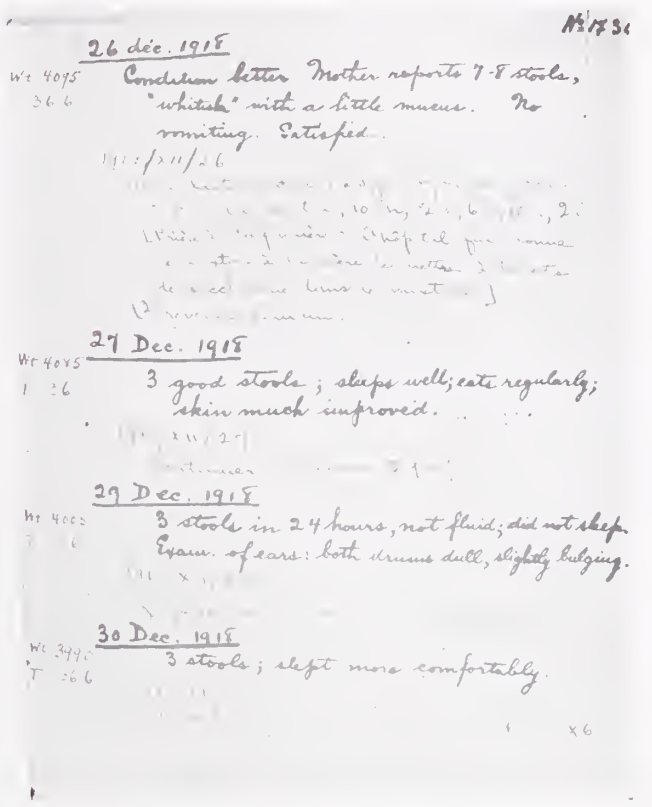

26 dec. 1918
Wt 40#5 36.6
Condition better. Mother reports 7-8 stools, "whitish" with a little mucus. No vomiting. Satisfied.
27 Dec. 1918
Wt 40#5 36
3 good stools; sleeps well; eats regularly; skin much improved.
29 Dec. 1918
3 stools in 24 hours, not fluid; did not sleep. Exam. of ears: both drums dull, slightly bulging.
30 Dec. 1918
Wt 39#6 36.6
3 stools; slept more comfortably.

Fig. 6. Page of chart showing method of recording directions given to patients.

tions to the patient in writing, to make them detailed, and to retain exact copies in the chart. After trial of several different methods we adopted the following procedure: A sheet of carbon paper was placed face downward over that part of the chart on which it was desired to make the entry. A sheet of blank paper was then laid over the carbon paper. The directions were written in pencil on the sheet of blank paper, and were at the same moment transferred to the chart through the intermediary of the carbon paper. The directions written on the sheet of blank paper were handed to the patient; the carbon copy remained in the chart (Fig. 6).

It is scarcely necessary to comment on the

great advantage which accrues to the doctor in the treatment of a case if his directions have been given not only in detail but also in writing. In subsequent consultations he is then able to have before him an exact copy of them.

"How often have you given the baby his feedings?"

"Every three hours."

"But you were directed to feed him every four hours. There on the chart you can see for yourself."

Many dispensary doctors are willing to write directions for the patient in detail. Few, however, have the patience or time to make two copies, one for the patient, the other for the chart.

Another great advantage of the method of recording directions on the chart by means of carbon paper proved to be the ease with which it was possible to distinguish the directions in regard to treatment from the various notes in regard to symptoms and physical signs. The latter were always in ink, the former in carbon imprint. The differentiation was as sharp as if the notes had been made in blue, the directions in red (Fig. 6).

THE RECALL SYSTEM FOR PATIENTS FAILING TO KEEP APPOINTMENTS

Each morning between eight and nine o'clock the dispensary clerk took from the file the charts of all those children who had appointments for the day, and placed them in a pile in a basket on the admitting desk in the same order as that in which the children were scheduled to arrive. As each patient presented himself, the dispensary clerk removed the corresponding chart from the basket and sent it into the room where the weight and temperature were recorded on the chart; from there the chart was carried into the examining room; and after the examination it remained on the doctor's desk until the close of the dispensary session, when it was collected, together with the charts of the other children who had been seen by the doctors, and returned to its place in the dispensary file. The charts which remained in the basket on the dispensary clerk's desk at the close of the day were, therefore, the charts of those patients who had had appointments but had failed to keep them. This group of left-over charts the dispensary clerk gave to the doctor in charge of the dispensary. The doctor looked them through, selected the charts of those patients whose return to the dispensary was a matter of importance, and indicated to the dispensary clerk the means best adapted to bring about the return in each case. If it was very important that the child return to the dispensary, especially if the case was difficult from the social standpoint, the doctor asked that a social service visitor be sent. Under ordinary circumstances, however, he instructed the dispensary clerk to request the child's return, by postcard.

[To be continued.]

CONSTRUCTION OF ISOLATION HOSPITALS*

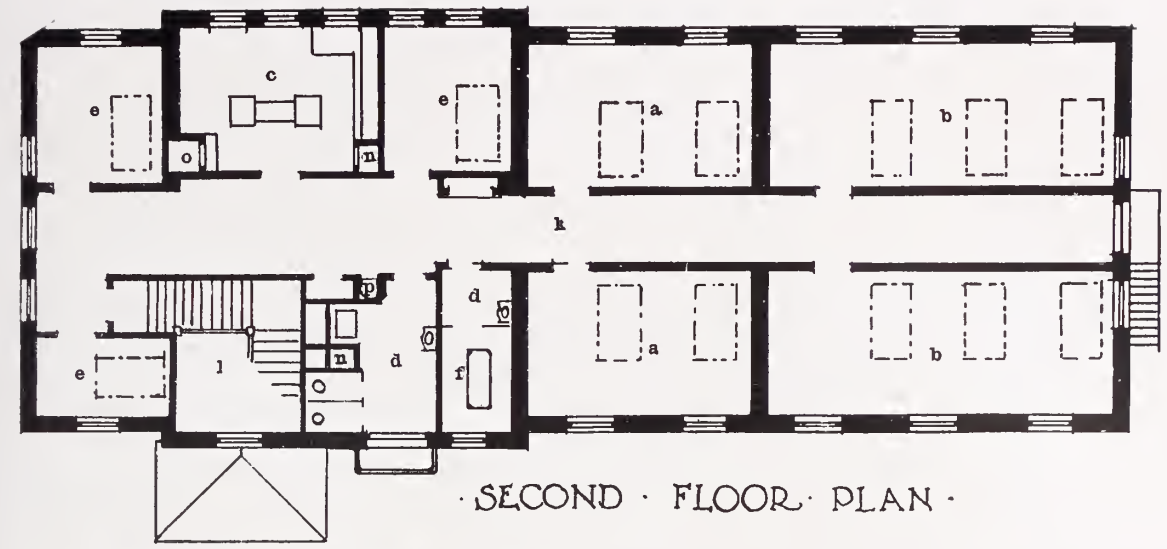
Choice of Superintendent First Requisite—Points to Consider in Deciding on Site—Contagion not Air-Borne—Desirability of Separation Room for Patients on First Entrance—Various Methods of Segregating

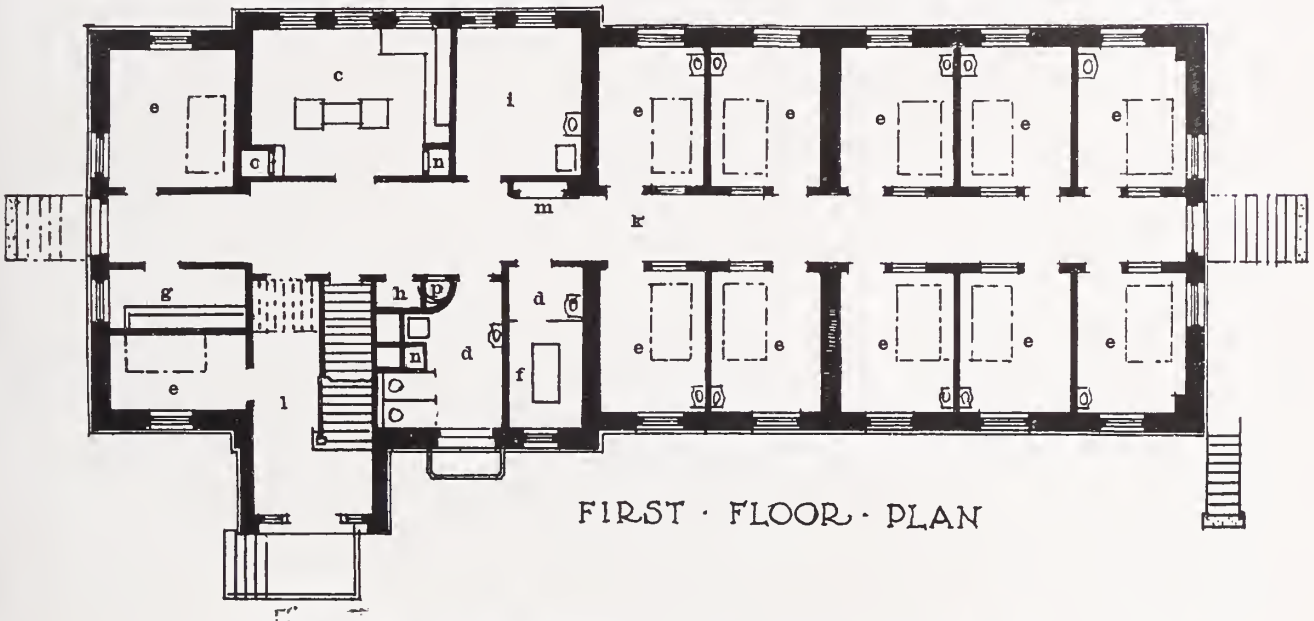
By D. L. RICHARDSON, M.D., Superintendent, Providence City Hospital, Providence, R. I.

PRELIMINARY to the building of a hospital for infectious diseases there are three important decisions to be made. The first is the selection of the superintendent. He should be a man who has had experience in a hospital for infectious diseases and one who has had some executive experience. Such a man should have had, also, general hospital experience, because there are many medical and surgical conditions that arise in, or are admitted to, a hospital for infectious diseases which require a well-grounded experience to meet them. The advantage of selecting the superintendent early is to put the burden of looking into the hospital construction and management elsewhere, and be available to watch the construction, make provision for the hospital equipment and organize the personnel at the proper time. This is very important. In small hospitals if a medical superintendent can not be afforded a nurse with general and infectious disease training should be selected early enough to see to the equipment and personnel.

The second is the situation of the hospital. Any hospital should be as centrally located as possible—particularly in large cities—and near car lines which furnish good service. However, central location should not be adhered to unless sufficient land can be obtained to furnish ample space about the hospital. It should be in attractive surroundings and have room for expanding. It is far better to go to the outskirts of a city to

*This is the fourth article in a series on the care of infectious diseases in hospitals. "The Care of Infectious Diseases in Hospitals," appeared in the April issue of The Modern Hospital, "Medical Asepsis in French and English Hospitals" in May; "Aseptic Nursing in American Hospitals" in July.





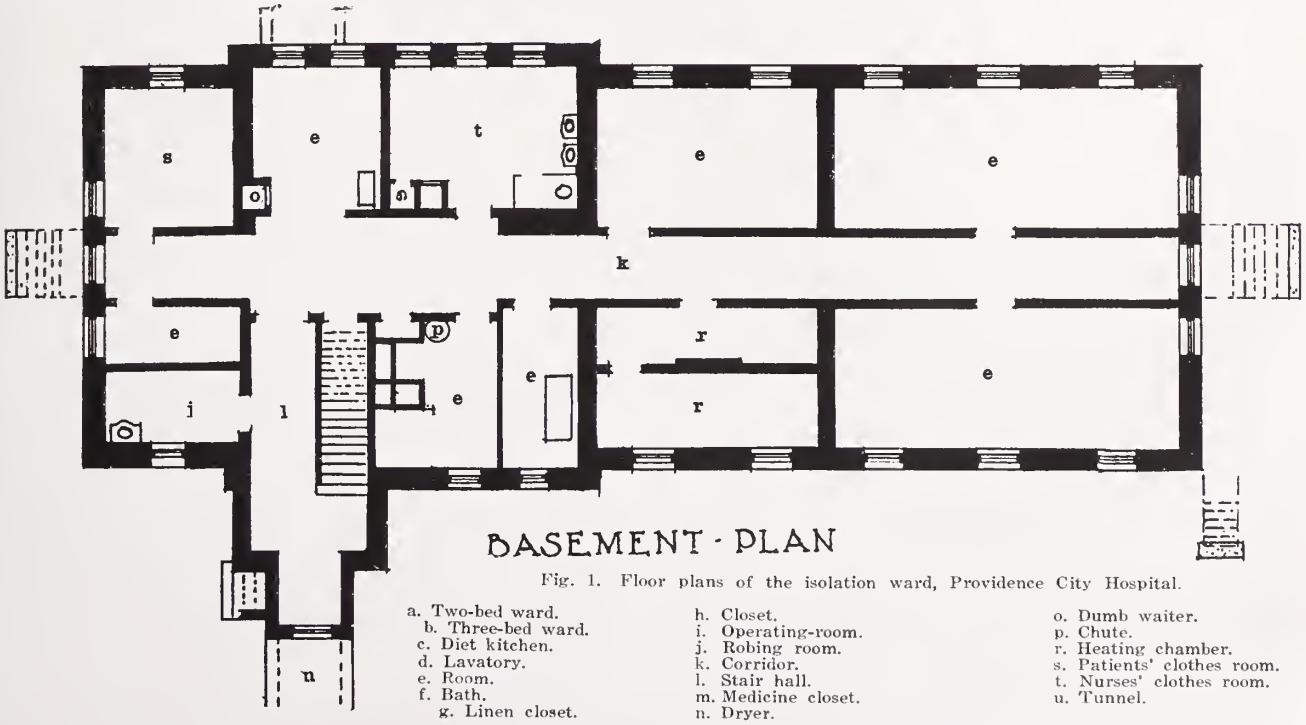


Fig. 1. Floor plans of the isolation ward, Providence City Hospital.

a. Two-bed ward.
b. Three-bed ward.
c. Diet kitchen.
d. Lavatory.
e. Room.
f. Bath.
g. Linen closet.
h. Closet.
i. Operating-room.
j. Robing room.
k. Corridor.
l. Stair hall.
m. Medicine closet.
n. Dryer.
o. Dumb waiter.
p. Chute.
r. Heating chamber.
s. Patients' clothes room.
t. Nurses' clothes room.
u. Tunnel.

obtain such a situation if necessary, for motor vehicles and trolleys make it entirely feasible. It should not be located near a busy railroad or noisy, ill-smelling factories. In very large cities, of course, it may be impossible to use such a location because of the distances involved. In such cases, valuable land will be required and many-storied buildings are to be preferred for economy. The upper floors where ventilation is the best can be reserved for patients. Complete fireproof construction is imperative.

There is no danger to any community from having a contagious disease hospital in its midst. Bacteria are certainly not wafted on the breezes to the neighborhood. In many studies, both in this country and abroad, no higher incidence of infectious diseases is shown among those living near such a hospital than among people living at a distance—assuming, of course, that patients are kept strictly to the hospital premises, by an enclosure preferably, in very congested districts.

There is no reason why contagious wards should not be attached to a general hospital. The chief advantages of such an arrangement are economy and better service to the patients. Such wards may receive the benefit of the hospital administration staff, kitchens, laundry, laboratory, and other utilities. It is not economical to maintain a separate contagious hospital of less than fifty beds and furnish strictly scientific and economic service. However, some general hospitals will refuse to consider such a proposition and a smaller infectious disease hospital can of course be operated and furnish very good service. Whenever infectious wards are established in connection with general hospitals the infectious wards should be in charge of a man who meets the requirements above referred to, although he need not have had so much executive experience. This is necessary to obtain best results, for many superintendents of general hospitals do not have the time, nor have they had the training, to conduct wards for infectious diseases.

The objects of a contagious hospital are to furnish good medical service and to remove the patient from the community lest he become a source of contagion. This can best be obtained by building and maintaining a modern hospital, well equipped, with a high-grade staff of physicians and nurses, and putting that hospital where it is easily accessible to relatives and friends of the patients.

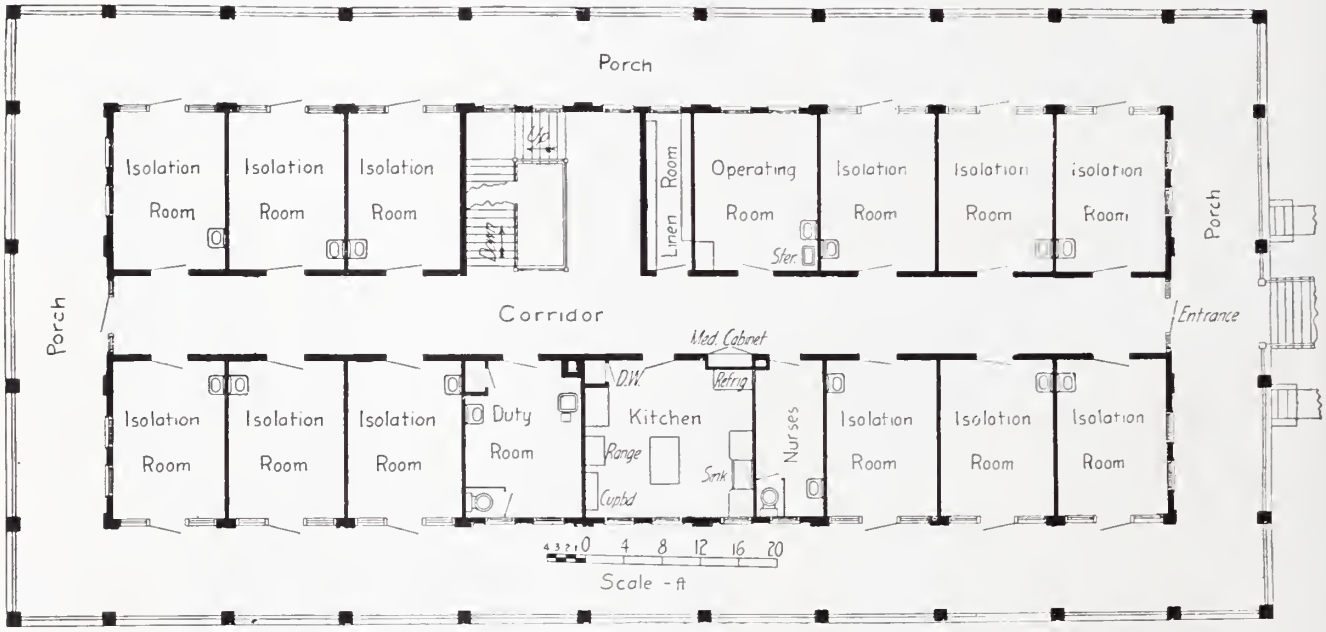


Fig. 2. Floor plan of the University of Michigan contagious ward.

A third question to be decided is what diseases shall be accepted for treatment. Heretofore, American contagious hospitals have limited their admissions to scarlet fever and diphtheria, sometimes including measles. Within a few years, there has been a broadening of their scope to include other common infectious diseases. This is especially true of such hospitals, mostly small, which have adopted aseptic nursing.

A modern infectious disease hospital should be able and ready to admit any kind of acute transmissible disease. It will be readily admitted that such hospitals are destined to be great teaching and investigation centers. They should attract many of the best medical men. During the last nine years, the following diseases have been admitted to the Providence City Hospital: cerebro-spinal meningitis, chicken-pox, diphtheria, ery-

sipelas, gonorrhea (all forms), influenza, measles, mumps, noma, pneumonia, acute poliomyelitis, scarlet fever, septic sore throat and tonsilitis, syphilis, smallpox, trachoma, tuberculosis, typhoid fever, typhus fever, whooping cough, and many miscellaneous diseases and cases for observation. It will also be noted that money spent in the treatment and prevention of such diseases is the best kind of an investment.

Those contemplating building should first decide the scope of their work. If other existing hospitals care for some of these diseases it would be inadvisable to duplicate their work.

Having decided on the diseases to be admitted, it is important to study next the prevalence of these diseases in the community from the reports of the health officer and the registrar's figures. It will not be necessary to furnish beds for all cases of infectious diseases, for many people will not go to the hospital themselves nor send their children there for treatment. There are available figures to guide in the case of scarlet fever and diphtheria and from these an estimate may be made of the probable space needed for other diseases. In many English cities, about 90 per cent of scarlet fever and diphtheria patients are hospitalized. The rate is not so high in this country, anywhere from 25 to 75 per cent; 50 per cent being a fair average. However, the public increasingly tends to go to such hospitals when these are well built and well conducted.

It is not hoped, nor is it expected, that a hospital should accommodate all patients in a widespread epidemic, as in the case of measles and influenza outbreaks. It would be too expensive and would have little effect on the course of such an epidemic which was out-of-hand. Under such circumstances, the hospital should concentrate its attention upon the treatment of the sicker and more destitute patients.

If an infectious hospital proposes to accept all kinds of infectious diseases, at least one bed to every thousand or fifteen hundred inhabitants should be provided. One will be guided somewhat by the proportion of people living in tenements and apartments, who are more likely to go to a hospital.

In dealing with actual construction, it will be best to study the wards first. Such ward construction will apply equally to a complete isolation hospital or infectious wards in connection with general hospitals. Later will follow a study of general construction and the relation of infectious wards to a general hospital.

It should be a well-recognized principle not to build large open wards for contagious diseases. This has been a common mistake. There are two reasons. Hospitals with large wards are not usually provided with separation rooms for observing cases when first admitted, and they are often sent directly to these open wards with the

Fig. 3. Contagious ward at the University of Michigan.

convalescents. Since an accurate diagnosis is not always possible, this is a very dangerous procedure and often leads to institutional outbreaks.

A second reason is that, in case a child is admitted with a mistaken diagnosis or is in the incubation period of another disease, if, at the time, he is in a large ward and in contact with many other patients, he develops a second disease, many of his fellow patients are likely to contract it. If the open ward is small, not to exceed six patients, then the amount of damage done is small and will not hinder admission to other rooms in the same ward. By the term "ward," I mean all the rooms on a single floor and under one nursing unit whether it includes a large open ward or not.

As a general rule, at least 33 per cent, and better 50 per cent, of rooms for patients should accommodate not more than one or two patients, and no rooms more than half a dozen. The exception to this rule is when open wards are to be divided into cubicles or the beds well spaced for the bed-isolation method.

In general a good division of a ward for a sin-

Fig. 4. Exterior view of the isolation building, St. Luke's Hospital, Jacksonville, Fla.

gle disease, say diphtheria, is to have 25 to 30 per cent of the rooms arranged for a single patient, as many more for three patients, and the remainder of the rooms for not exceeding six patients. In isolation wards, where a great admixture of

diseases are to be admitted, rooms for a single patient, or at most two, should be the rule.

It will be appreciated that division into such small units makes it possible to use all wards if necessary for isolation wards. As the season's work quiets down, it is possible to transfer patients from one ward to another, thus not keeping several open wards for a very few patients.

The whole object is to provide accommodation for a variety of contagious diseases, for observation of all new cases of the more common diseases like scarlet fever and diphtheria, and to prevent the spread of secondary disease, should it be once introduced.

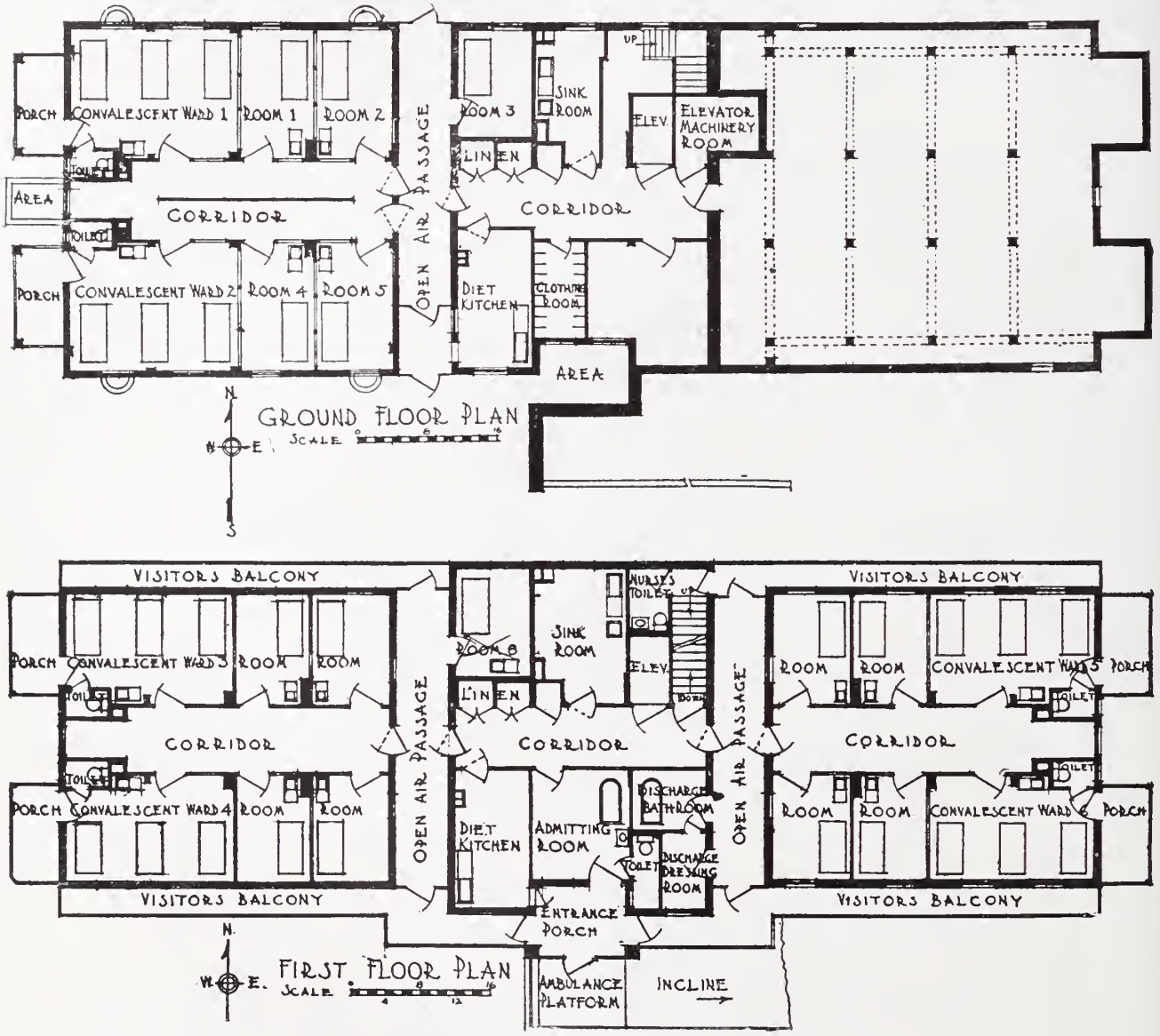


Fig. 5. Floor plans of the isolation building, St. Luke's Hospital, Jacksonville, Fla.

There are several methods, already referred to, of segregating patients into different units: the bed isolation system, the cubicle system, and the box or room systems. The first has its uses particularly in hospitals already constructed with large open wards. If the beds are ten to twelve feet apart on centers, lavatories placed at each end of the ward, hooks and shelf for each patient, it is very useful for infants and children who will not get out of bed, who are not suffering from early measles, chicken-pox or smallpox. The objection is that large children will get out of bed, particularly at night after the lights are out, and the aseptic technique is thus rendered useless. It is not through the fear of aerial transmission that large open wards are not advised, but because of the difficulty in controlling the patients. This can to some degree be remedied by putting the nurse's desk in a room next to the ward, leaving a broad opening into the ward so that the patients can be observed at all times.

The cubicle system, with incomplete partitions, is entirely satisfactory except that convalescent children may throw things over the top of the partitions. As a matter of fact, in original construction the saving in cost of such low partitions

over complete lath-and-plaster walls is very slight, if any, and the subsequent care of such partial partitions will certainly be more expensive. The cubicle system is most useful in subdividing large open wards just as has been done in England. Personally, I would advise complete walls separating the different rooms, for easier control of patients and for reasons of privacy. Walls of lath and plaster or plaster block and plaster are preferable.

When the ward is properly arranged it is preferable that the partitions between adjacent rooms should be complete. Under certain conditions a window may be put in this partition to allow the patient to see his neighbor. The rooms should be along both sides of a central corridor; doors should be opposite to each other to aid ventilation, and beside the door there should be a window to allow the patient to see his neighbor across the hall and to provide for further ventilation. In case of opposite or adjoining rooms containing patients of different sexes a sash curtain may be placed over the lower sash.

A room for one patient should be at least eight by twelve feet and better nine by twelve feet. One for two patients at least twelve by twelve feet. To provide elasticity, the rooms should be able to accommodate either a crib or a bed. The actual size will depend upon the position of the door, windows, and lavatory; bearing in mind the necessity of making it possible for the nurse to work between and around the bed without allowing her clothing to touch another bed or other furniture in the room. If there is working space enough there will be plenty of air space for the patient. Roughly, each bed should have floor space of 90 square feet. This generous working area also removes the patients far enough apart to diminish possible contact in case there are two patients in the same room.

Each room should be provided with a lavatory. In case the room is a large one it may be wise to have more than one, so that a nurse will not have to travel more than 25 or 30 feet to wash her hands. This is an important matter. It is useless to attempt aseptic nursing without enough lavatories to make handwashing as little trouble as possible. The hands must be washed in running water and the bowl should never be provided with a plug. The water should be mixed hot and cold, escaping from a single nozzle and the hands washed in as warm water as possible. It should be turned on either by a rugged foot lever, a knee lever, or an elbow lever, preferably the first. The objection to the forearm style is the danger of contaminating the lever with a gown-sleeve, and that the lever of somes types is long enough so

Fig. 6. Part of a box-room in the North-Eastern Hospital, London.

that packings do not stand up long. There are on the market, however, some very good forearm lever faucets. The objection to the knee lever is that it may produce a traumatic arthritis. A good foot-lever valve is probably the best, although the initial cost may be more than for the forearm faucet.

A towel rail 16 to 18 inches wide above the bowl provides a very convenient place to hang the individual hand towels.

There should also be a small shelf on the wall on which can be placed poisonous solutions, etc., and the patient's thermometer, high enough to be out of reach of a convalescent child. There also should be two hooks on the wall, conveniently placed but not too near the patient's bed, on which gowns can be hung, one for the doctor and one for the nurse.

The lights should be arranged to turn on by a switch in the corridor so that the nurse can light a room without contaminating her hands.

Fig. 7. Bed isolation, septic scarlet fever ward, North-Eastern Hospital, London.

Fig. 8. Administration building and series of wards, Philadelphia Hospital for Contagious Diseases.

There are two objections to too much glass in the room walls—lack of privacy, and the large amount of work required to keep it clean. The advantage is the better observation of the patients by the nurse. The plastered wall should be painted with a durable enamel paint so that the wall can be washed frequently if necessary. It has been found at the Providence City Hospital and elsewhere that soap and water is entirely sufficient for the cleaning process. In the first place, few disease organisms are to be found on the walls. Fumigation has been largely abandoned. A careful study of this matter will be found in the October, 1913, issue of THE MODERN HOSPITAL. Should one believe that disinfectants are necessary, it will be necessary to put up the wall for some distance of marble or some vitrified material. The floors need be constructed no differently than in any general hospital. Wood and linoleum are good, the latter being preferable. Terazzo, cement, or tile floors are excellent from the standpoint of cleanliness but are rather cold for the patient and hard on the nurses' feet. The horizontal angles at the floor and perhaps the vertical angles should be coved, to allow easy cleaning.

The general arrangement of the patient rooms and the utility rooms should follow those of any well-built general hospital. Utility rooms should be centrally placed to save steps.

There should be a toilet room with sufficient toilets for the use of convalescent patients from the same unit. An adult, who usually can be depended upon, may go to a common toilet room, but to a compartment marked with his name or disease. Hospitals are sometimes built with individual toilets and lavatories. This is unnecessary and entails a large initial outlay, takes space, and requires much work to keep clean. Seventy-five per cent of patients in contagious hospitals are children under ten or twelve years of age and they can easily use the bedpan either in the bed or on the floor, while convalescent adults can put this pan in a chair. When building for private patients, separate toilet facilities may be justified.

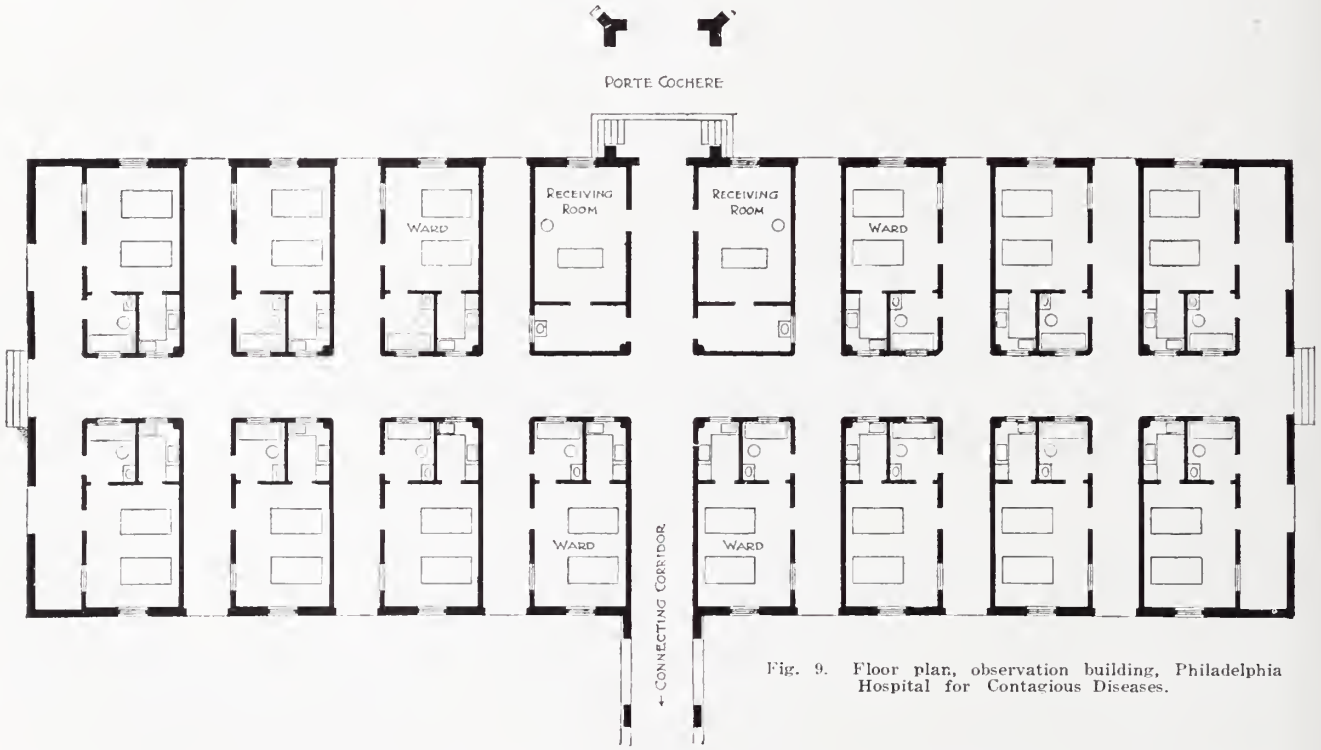


Fig. 9. Floor plan, observation building, Philadelphia Hospital for Contagious Diseases.

Fig. 10. Exterior view of the observation building, Philadelphia Hospital for Contagious Diseases.

In the toilet room or in a utility room should be installed a utensil sterilizer to sterilize bedpans and urinals. The ward kitchen should also be provided with a utensil sterilizer where all soiled dishes may be sterilized before washing.

The ideal way to dispose of linen is to drop it into a chute, through a door with a spring hinge and a hook, so that it can be opened by the fore arm. This linen should drop into a canvas bag in the basement, in which it is collected to be sent to the laundry. Otherwise it may be kept in the corridor or utility room, and regularly collected. The bag should be closed by some kind of a purse-string.

The need of a dressing or operating room is not essential. If there is only one ward such a room is advisable, but if there are several wards, one or more situated in first-floor wards will suffice.

In every ward should be one or more bathrooms, provided with a tub. Many new patients have bed baths, for they are too ill for a tub bath, so that a single tub suffices for admitting and discharging. For the convalescent, one or more tubs are a convenience. Tub bathing, in hospitals, however, is not to be encouraged in children, even in the same unit unless the tub is washed out between baths. In fact, patients suffering from different diseases may use the same tub if the tub is carefully washed out between units. Bed bathing for small children and babies is quite as convenient as the use of a tub.

In a good-sized ward of from 25 to 30 patients, an admitting room is useful. It must be equipped with lavatory and two hooks for gowns. In small wards or wards with single rooms, the patient might just as well be admitted directly to the room. The idea of having a common admitting room for several wards is not to be recommended unless the hospital is a large one which could afford to maintain a nurse there constantly, and unless the room is so situated and connected with the wards that few people would be likely to be near during transportation.

It is of great importance to provide veranda space for such cases as need open-air treatment and for the convalescents who are up and about. The objection to a veranda on both sides of a building is that it makes the rooms dark. This is a more or less serious objection. It is well, at the end of a building, to build a piazza for convalescents from the same disease—or this may be subdivided for two diseases. It is not necessary to provide veranda space for each bed all of the time, even for the acute cases. If the corridors are not less than 7 feet 6 or 8 inches wide, and the doors 3 feet 8 inches wide, when the beds are on wheels the patient may be wheeled to any other room or piazza if necessary. So that a veranda at the opposite end of the ward or one extending out from the side, perhaps leading to some other building, can by this measure be easily utilized for all such patients as require open air.

Whether verandas are provided or not, the rooms should have plenty of light and be so arranged as to furnish cross-draft as much as possible.

The problem of visitors to a contagious hospital is a difficult one. One use to which a balcony can be put is to allow parents to see their children from the outside. A balcony on which patients are placed or a narrow one for visitors alone, should be approached from the outside, if on the first story, but a second story balcony should communicate with an interior stairway, so that the friends can go up the inside stairway, and out on the balcony. This matter will be spoken of again in a later article covering management.

An open balcony without covering should lead from every utility room. It has been found that rubber goods, etc., if washed with soap and water and hung out in the air and sun are never a source of contagion. There is no need of sterilizing clothing except underclothing; airing and sunning is quite sufficient. These airing balconies are very useful for such purposes as well as for a place for brooms, mops, and similar articles. They should be carefully planned as to size and construction so that provision will be made for these things and for hanging up clothing, with shelving for rubber goods and utensils, and lines for rubber sheeting, etc.

The heating and ventilating problem of a contagious hospital differs in no way from that of a general hospital. Since most of the patients are children it is important in cold weather that there be an automatic regulating system for heat. Children can not always be kept covered and the rooms must be kept warm enough to insure that they will not be chilled. Either the direct or indirect system may be used, but if the former is employed, the radiators should be recessed and protected or placed high to save burning accidents. The direct type of heating demands a ventilating system. In the warm weather, however, open-window ventilation is to be advised.

The material used for construction is not essential. Permanent construction is advised if funds are available as it is less expensive in a long period of years. The material for interior construction likewise should be durable but not elaborate. A hospital for infectious diseases may be ever so beautiful and attractive, but the results of treatment depend not on this but upon the interior arrangements, equipment, and particularly

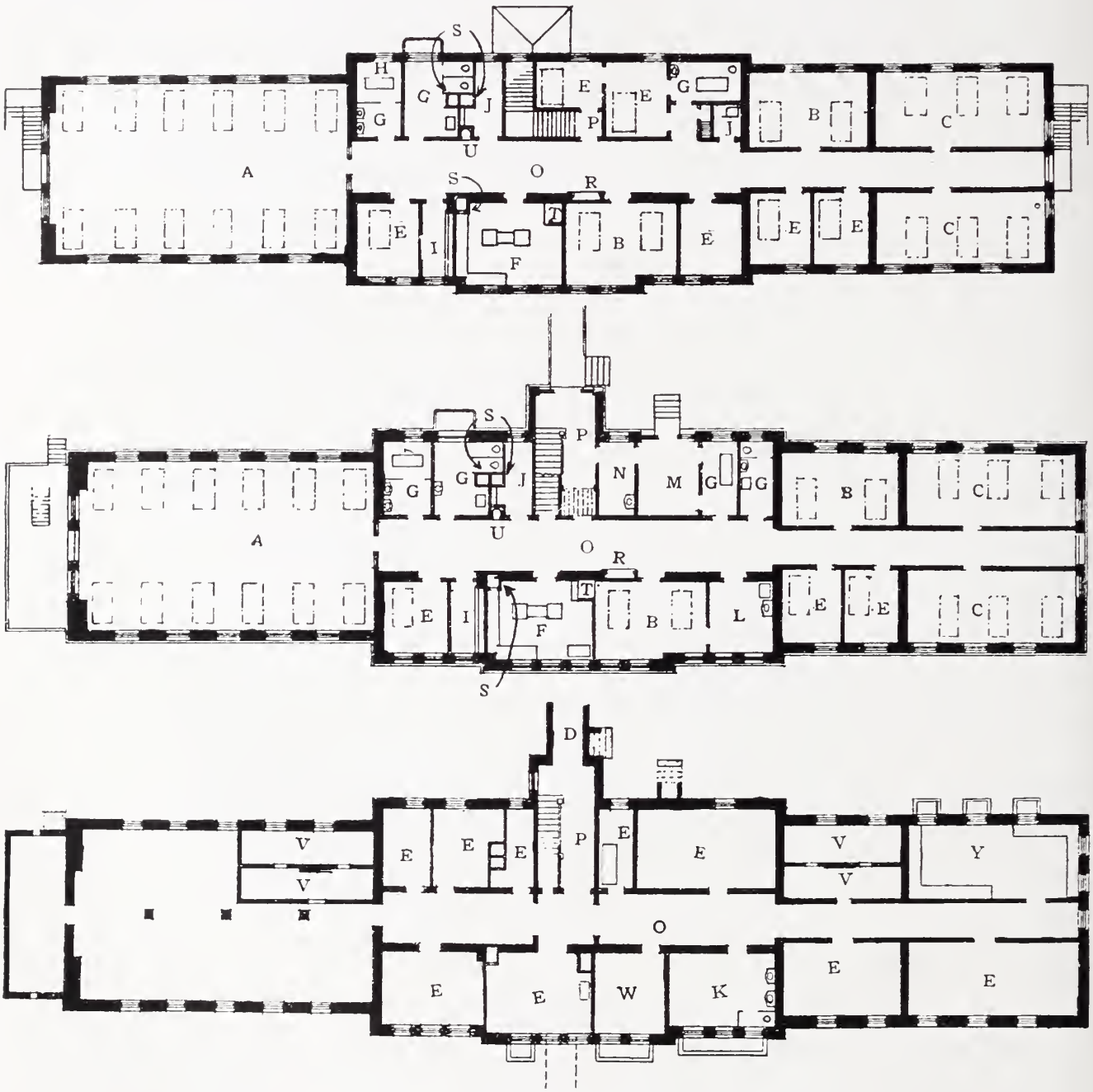


Fig. 11. Floor plans of the diphtheria ward, Providence City Hospital (basement plan below, second floor above).

A. Twelve-bed ward.
B. Two-bed ward.
C. Three-bed ward.
D. Tunnel.
E. Room.
F. Diet kitchen.
G. Lavatory.
H. Bath.
I. Linen closet.
J. Closet.
K. Nurses' clothes room.
L. Operating-room.
M. Examining-room.
N. Robing-room.
O. Corridor.
P. Stair hall.
R. Medicine closet.
S. Dryer.
T. Dumb waiter.
U. Chute.
V. Heating chamber.
W. Patients' clothes room.
Y. Laboratory.

upon the intelligence and faithfulness of its managers and its personnel.

The ward buildings may be one or two stories high, depending upon the number of patients it is necessary to build for. Where land is very valuable, as in the center of the city, a many-storied building may be used. The general arrangement of the wards and their position in relation to other buildings, need not differ from a general hospital. The administration and service offices and laundry facilities should be centrally located. All buildings, except possibly the ambulance station, should communicate by underground tunnel and there should be overhead walks for use in the warm and fair weather. The underground tunnel has been looked upon as means of dissemination of infection by connecting different buildings, each perhaps containing different diseases. This fear has no foundation in fact. At the Providence City Hospital such tunnels have been in use for ten years. They are very essential for the distribution to and from the wards of food and supplies and for the convenience of the personnel.

The nurses' quarters and quarters for the help

may be combined with the administration and service sections, but it is far better to put them in one or two buildings by themselves where the individuals can have better opportunity to enjoy something approaching home life. In small hospitals they may be housed in the same building; in larger hospitals, in two or more. Each individual should have her own room for two reasons: for privacy, and to reduce opportunity for contact in case of infection. They may all live in the same home regardless of the ward they are working in.

The nurses may all eat in a common dining-room, and the other help in another. This is entirely feasible, providing the technique is properly observed. It makes the nurses and help more contented, for their freedom is not taken away by shutting them up in their respective wards.

The accompanying table of disease among all employees at the Providence City Hospital covers eight years. The first column of figures refers to the number of different individuals who have worked in the various capacities. Individuals who have occupied more than one position have not been counted twice:

SECONDARY DISEASES AMONG EMPLOYEES: 1911-'18

Employees	Number of	Diphtheria		Scarlet Fever		Measles		Rubella		Mumps		Influenza	
		Number	Per cent of attack	Number	Per cent of attack	Number	Per cent of attack	Number	Per cent of attack	Number	Per cent of attack	Number	Per cent of attack
Ambulance attendants	3	...	...	...	...	...	...	...	...	...	...	1	33.3
Ambulance drivers	7	...	...	...	...	...	...	...	...	...	...	...	....
Attendant nurses	60	1	1.6	...	...	...	...	...	...	...	...	...	....
Engineer's dept.	19	...	...	...	...	...	...	...	...	...	...	...	....
Druggists	2	...	...	...	...	...	...	...	...	...	...	...	....
Graduate nurses	76	3	3.9	2	2.6	...	...	1	1.3	1	1.3	4	5.2
Housemaids	26	1	3.8	...	...	...	...	...	...	...	...	...	....
Housekeeper	1	...	...	...	...	...	...	...	...	...	...	...	....
Kitchen employees	69	...	...	...	...	...	...	...	...	...	...	...	....
Laboratory assistants	12	...	...	...	...	...	...	...	...	...	...	1	8.3
Laundry employees	45	1	2.2	2	4.4	...	...	...	...	...	...	1	2.2
Laborers (outside)	29	...	...	...	...	...	...	...	...	...	...	...	....
Office employees	30	1	3.3	1	3.3	...	...	...	...	...	...	1	3.3
Orderlies	60	...	...	...	...	...	...	...	...	...	...	1	16.6
Out-Patient dept.	8	...	...	...	...	...	...	...	...	...	...	...	....
Physicians (resident)	57	3	5.2	1	1.7	...	...	...	...	1	1.7	1	1.7
Pupil-nurses	740	32	4.3	47	6.3	4	0.5	6	0.8	7	0.9	12	1.6
Seamstresses	2	...	...	...	...	...	...	...	...	...	...	...	....
Stewards and porters	100	...	...	...	...	...	...	...	...	1	1.0	...	....
Superintendents and assistants	5	...	...	...	...	...	...	...	...	...	...	2	40.0
Superintendent of nurses and assistants	5	...	...	...	...	...	...	...	...	...	...	...	....
Waitresses	45	...	...	...	...	...	...	...	...	...	...	...	....
Ward maids	106	1	0.9	1	0.9	...	...	...	...	...	...	...	....
Total	1507	43	2.8	54	3.5	4	0.2	7	0.4	10	0.6	24	1.5

In only two or three instances had we any reason to believe that a nurse contracted a disease from another nurse either in the nurses' home or in the dining-room. It will also be noted that the nurses show the highest percentages of attack, the graduates nearly as high as the pupils although it must be remembered that while the graduate may have been in service years, the pupil only remains two or three months.

The laundry of a contagious hospital should be a generous one. In no other kind of a hospital is there so much linen to be washed. One item alone, hand towels, may amount to hundreds or thousands in large hospitals. It is not wise to place severe restrictions on the amount of linen to be used, because of the danger of its use by the nurses on patients in different units. The essential features of a good laundry pertain as well to those of any hospital, namely, good light, ventilation, accessibility, and the arrangement of the laundry machinery in such a manner as to make the process orderly and progressive. Many hospitals sterilize their linen before washing, or use sterilizing washers. In the latter instance, a separate sorting room is provided where the linen can be placed in the double-headed sterilizing washer, the other end opening into the clean washing room, or a non-sterilizing washer, one with openings on two sides facing into the infected sorting room and one on the clean side. This is perhaps a good plan in very large hospitals but is not necessary in smaller institutions. The key to success in laundering of infected linen is the way it is handled during collection and washing. Methods used in a commercial laundry are not satisfactory or safe, but if the washing is done with water at a temperature of 95 degrees or thereabouts, all organisms, except perhaps some spore-bearers, are killed. Careful bacteriological tests made at the Providence City Hospital substantiate this. Methods of handling infected clothing will be dealt with in a later paper.

A sterilizing plant should always be provided. The sterilizer should be large enough to take one or more mattresses, depending on the size of the hospital, and to it should be attached a formaldehyde apparatus for running formaldehyde gas into the chamber instead of steam when the use of steam would damage the articles to be sterilized. The sterilizer may be placed in one room, one side of which is reserved for infected material and the other for it after sterilization. Another method is to put a double-headed sterilizer through the wall of two non-communicating rooms, one for the infected room and the other for the clean room. It should be accessible by tunnel, if possible, to facilitate collection and delivery, especially during inclement weather.

There need be no particular features of construction of the ambulance station. The expense of a sterilizing room for ambulances is not necessary under a system of strict cleanliness.

The same is true of the main kitchen and supply rooms. There are no special features except

possibly a sterilizer for utensils that must necessarily be exchanged between the main and ward diet kitchen. If, however, the diet kitchens are provided with sterilizers, the cleaning can be done in them, saving the main kitchen the work.

So far as construction is concerned, the relation of the infectious wards to a general hospital need be no different from their relation to other parts of a complete infectious disease hospital with one exception. The infectious disease wards should be set apart from the main plant, not any particular distance but that it may be possible to control entrance of persons who rightly belong there and keep the patients from wandering to other parts of the hospital. If patients are allowed out of doors during convalescence it is feasible to have one or more separate playgrounds for those suffering from separate diseases.

LITTLE JOURNEYS TO PLACES "OVER THERE"

L'Hopital Hospice de Dreux—A Modern Hospital in a Beautiful Old Historical French City—Le Chateau de la Fontaine Bude—Where French Tuberculous Soldiers Are Cared for by the American Red Cross

By MARGARET J. ROBINSON, R.N., With the American Red Cross, Paris

TWENTY years ago, in the city of Dreux, a substantial residence with gardens and orchards was given to the municipality for use as an *asile des vieillards*, or old people's home. Community hospitals in France and on the Continent are frequently of this type, as hospitals are still used for the most part by the old and the poor, being, as a rule, charitable institutions rather than general hospitals.

The maire and the civil administrators of the city, during the few years previous to the war, happened to be men of progressive tendencies and men who took a vital interest in public welfare. Through their efforts, a subvention of 500,000 francs was obtained from the government, and, with the 400,000 francs of the endowment and surplus funds of the old hospital, construction was started for a new "hôpital mixte" at Dreux.

Fig. 1. The Door of Hope.

Fig. 2. View of the administration building and the Pavillon Franco-Americain.

On October 26, 1913, the hospital was formally opened under the auspices of M. Raymond Poincaré, the president of the French Republic, and, fortunately for France, was completed and ready to receive patients before August, 1914.

In peace times the hospital is prepared to care for 200 medical and 200 surgical patients. At present it is almost all military, having 510 military beds and only 150 civil. During the stress of the drives on the western front, by the addi-

tion of tent capacity, 780 military patients were cared for at one time. The hospital is now one of the best reconstruction laboratories in France, doing constant and splendid work in the task of making the maimed well again.

The hospital buildings at Dreux are on high ground, raised above the main roads on the one side and over a small river valley on the other so that they have good space for air and light and a good position for drainage. The buildings stand about a court and formal gardens.

The administration building, first seen from the street above the terrace, contains offices, laboratories, and the Franco-American dispensary. Going through this building, one enters on the garden court. At the right is the terrace over the river valley, and at the left the "pavillon Franco-Américain" and the building for physiotherapy. On the opposite side of the court from the administration building is a broad archway joining the medical and surgical buildings. Beyond this archway are pleasant gardens. On the left of these are the kitchen buildings. Facing the gardens is the maternity building, which is the old residence, formerly the original old people's home, and on the right below the terrace is the service building.

Fig. 3. In the waiting room of the Franco-American dispensary.

The staff administration of the hospital is in the hands of a *médecin chef* and his corps of assistants who are surgeons and medical men, specialists in contagion, physiotherapy, radiography, and branches of special medicine and surgery. All are military medical officers. The administration of the Franco-American pavilion and dispensary is in charge of both French and American personnel. The staff for the work on tuberculosis is largely from the Commission for the Prevention of Tuberculosis in France (Rockefeller Foundation). Material assistance in building and supplies has been received from the bureau of tuberculosis of the American Red Cross.

Fig. 4. Four patients—soldiers of France—a Senegalese, a Moroccan, a Tunisian, and an Algerian.

American assistance has been given to this hospital, as it has been given to other hospitals in France for the care of the tuberculous, because of the gravity of a situation due to the increase of this disease among both the civil and military population.

It has been estimated that from 70,000 to 100,000 French soldiers have been found tuberculous. The facilities for the care of the tuberculous have been taken over for them by the military authorities. This left practically no facilities for the care of the civilian population. Added to this unfortunate condition, there are 5,000,000 refugees in France, displaced from their homes and scattered throughout the country. Among them are many tuberculous who are a menace to the districts they occupy.

The Commission for the Prevention of Tuberculosis in France and the American Red Cross, realizing the gravity of this situation, have given assistance to already existing hospitals to care for the tuberculous and have established Franco-American dispensaries in various cities and towns which are centers of population. The Franco-

Fig. 5. The air porch of the children's floor in the Franco-American pavilion. The médecin-chef and his French and American assistants.

American pavilion has three floors of separate service, for men, women, and children. All the wards are large, well-ventilated, and well-lighted, and each floor has its own air porch. The nursing care is given by the Sisters of Saint Paul du Chartres, who have charge of all the nursing care of the hospital. This order, which has its mother house in the famous old cathedral city of Chartres, is one of the great nursing orders in France, with branches in both Italy and Japan.

In the Franco-American dispensary, of which some illustrations are given here, both French and American doctors give thorough physical examinations to all patients applying for treatment. The nurses of the dispensary are French aides who have been trained under American nurses.

I happened to visit the Franco-American pavilion just a few days after Christmas, and the children's floor was still having holiday. The tree with its trappings was still in the center of the ward, and toys sent by the American Red Cross were still wonderful and would be wonderful as long as a rag of them lasted. It was chocolate time, and big grandfather's cups of chocolate were being passed around.

I had been to the pavilion a month before, and already could see the change in several of the children who had entered in poor condition. Small, thin bodies were rounding out. Cheeks had changed from yellow to pink. France needs every one of her babies to replace her millions of dead and mutilated and physically exhausted.

The physiotherapy building is a very busy center of the hospital. In one room the masseurs work over arms and legs which have lost function through various sorts of wounds. During my last visit when I was in this room several colonials, Senegalese, Tunisians, and Moroccans were among the patients.

The physiotherapy building is equipped with a completely furnished Zander room for the manipulation of joints and muscles, a hydrotherapy department, and radiographic laboratories for

Fig. 6. The old Château de la Fontaine Budé, the home of the personnel. (See pp. 122-3)

both radiography and radiotherapy. As a large part of the hospital patients are under physiotherapeutic treatment, the waiting rooms are full of soldiers awaiting their turn. The surgical pavilion has large wards for military patients who are in need of further dressings or operation.

The buildings, all well-constructed, have good sanitation, light, and air, and polished cement flooring. An operating service is also in this building, and each floor has its own dressing room. In the center of each ward is a modern dressing carriage with tanks for running sterile water.

The medical building is of the same construction, and its wards have both civil and military patients. Each ward has its own dining room for convalescents.

Fig. 7. The reconstructed château and porches (See pp. 122-3)

Beyond the medical and surgical pavilions, in the old garden, there is a small service building known as the *cuisine*, where all the food for the hospital is prepared. The building has food storerooms and a white-tiled kitchen, about 20 by 35 feet. In the center are large stoves, each with great copper pots set into the stove itself. The day I visited the *cuisine*, the floor was being washed by two of the sisters, two Boche prisoners, and two French convalescent soldiers. The soapy water was poured on the floor, and the kitchen personnel of six then swept it out of the door and over the walk into the gutter, with long, loosely woven brush brooms.

As we entered the maternity building at the back of the garden, which is the old residence, we were greeted on the porch by a cooing dove in a big wooden cage. The building is in good condition and is kept very clean. There are no sisters or trained nurses in this building. The obstetrical nursing is in charge of a *sage-femme*, or midwife, and her assistants, who do not even wear cotton uniforms. There is no nursery. The babies are in cribs, each beside the mother in the ward. No air is allowed in the room with the mothers and babies.

Below the terrace on the right there is a contagion pavilion and service, the latter now in use for sick Boche prisoners.

The service building contains the steam plant, disinfecting plant, and laundry. The laundry is equipped with some modern machinery, such as washers, wringers, and other things. The drying is still done on racks, and the washing process is still started in the washhouse on the little river.

Fig. 8. The fountain that plays forever and gives the Château de la Fontaine Budé its name (See pp. 122-3)

The clothes are first dipped in the river and then scrubbed on the boards and stones at the edge.

The Dreux hospital—beautifully situated, well-constructed, and one of the most modern hospitals in France—is a strange mixture of the best modern hospitalization and the primitive traditional Continental methods. It has made great strides beyond many other hospitals in France and has done an invaluable work for France in the care of its wounded of the war. Perhaps to American eyes and ideals its greatest need is for trained women, graduate nurses, and a school in which these women can train others to come after them. Perhaps some day this too may enter its doors, and then with the fine things and the fine spirit it already possesses, the hospital will be an impulse and an inspiration for France to be proud of and to imitate.

To the Château de la Fontaine Budé

We first went to Yerres last autumn when the trees were blooming in soft browns and mauve and gold, and there were pictures everywhere in the vistas through the even rows of formal trees that bordered the roads we motored through. Then the gardens were colored with foliage and fall flowers and the potager had all sorts of green stuff in it that was good to eat. Then, as we entered the gates past the house of the concierge, we saw the round stone fountain pool that always throws its circular stream of water heavenwards, and near the entrance porch of the château was a convalescent poilu in blue, sunning himself, perched on an old sundial, and caressing a tortoise-shell cat. On each side of him was a carved marble jardinière filled with blood-red geraniums. Through the pines and linden trees, a tinseled red setting sun shone like a ball on a Christmas tree.

This time we went out to Yerres in January. The houses and gardens we passed reminded one of the diamond-dusted scenes on old-fashioned Christmas cards.

Again we passed through the gates by the house of the concierge. A man in blue, a small bare-kneed boy, and a women with a black knitted cape over her shoulders came out to greet us with a cheery, "Bonjour, Messieurs et Mesdames."

The château is on high ground, and the road winds higher and higher as you get to it. It is four hundred years old, most beautifully situated and beautifully constructed and surrounded, but, like most of these old places, it was lacking in the ordinary modern conveniences and sanitation, and, when the American Red Cross took it over for its present purposes, it was necessary to install central heating, lighting, and modern plumbing. Outdoor treatment for tuberculous patients was assured by the addition of broad verandas along the front of the three floors of the main building. At present, the château, as the Hôpital Croix Rouge Americaine, is accomplishing a splendid work for these *blessés de tuberculose*, this pathetic group who have little of the glory of the wounded hero, and who receive less of the

Fig. 9. A view of the orangerie that is now a laboratory, and some of our patients.

pride and sympathy of family and friends. There are many such in France and few facilities for their care.

The high-ceilinged rooms, long French windows, and sun porches, with the addition of the modern equipment which has been installed, makes of the château an ideal sanatorium for the care and treatment of tuberculosis. The patients received are the French soldiers known as "Réformés No. 2," men who cannot return to further military service. Those whose illness is not too far advanced when they are received into the hospital for treatment are gaining constantly in strength and weight with the best of medical and nursing care, the good food furnished by the Red Cross, and the open air afforded by the château and its beautiful surroundings. Those who are worn by the disease before coming to Yerres, are given care and comfort until the end of their journey. Then, too, when that journey ends, the Red Cross sees that they go to rest with all the quaint religious ceremony of their church and country, even to the lumbering fringed and draped funeral carriage, the walking priests and mourners, and the wreaths of purple beads or many-colored flowers.

Fig. 10. The giant cedar of Lebanon which makes shade for *les blessés de tuberculose.*

The château hospital is administered through the bureau of tuberculosis of the American Red Cross by American doctors, nurses, and nurses' aids. The nurses' aids are doing valuable work with the convalescent patients and also act as interpreters for the household. The ménage is in the hands of a French housekeeper and maids, which tells without saying that the meals are well cooked and the buildings clean and orderly.

The porches and wards are arranged to care for eighty-five patients. The day we visited Yerres, there were rows of chaises-longues on the porches, each one with a poilu in it, well-wrapped in blankets and mackintoshes; mere boys most of them were. They had apparently lost their characteristic national fear of a *courant d'air*, and were enjoying the cold. When the dinner gong sounded, there was a rush for the dining room, and it did not take long to empty the plates of all the food in sight.

Upstairs, the open wards were filled with hospital beds, hospitals beds with pink bedcovers. There were a number of bed patients. All the windows, which reached from the floor to the ceiling, were opened wide. The bedside tables had all sorts of little personal belongings on them and the handwork that some of the patients who were able were making. Everybody seemed to be having a good time. The American nurses and aids look upon their soldier patients as just big children. The château is still a family residence.

When the American Red Cross finishes its hospital work in France, which will be within a few months now, the château will be turned over the French government organizations to continue the work among its tuberculous soldiers—truly a generous gift to France and her long-suffering soldiers, from a friend who understands her need.

The MODERN HOSPITAL

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The Growth of the Hospital Idea

Figures in a recent official report to the U. S. Department of Labor show the astounding growth of the hospital idea in this country during the last half-century. In 1873—less than fifty years ago—there were in the United States only 149 hospitals; today there are nearly 9,100—an increase of nearly 6,000 per cent in the number of institutions. In 1873 the total bed capacity of the then-existing hospitals was 35,453; today the hospitals of the country have a total capacity of approximately 869,000 beds—an increase of over 1,000 per cent. The amount of money at present invested in these institutions is roughly estimated at nearly two billion dollars; the annual expenditure for supplies, equipment, upkeep, and new construction is said to be about three-quarters of a billion.

There is much that is gratifying in these enormous totals. Certainly, no stronger testimony could be adduced to show that the people of the United States are thoroughly converted to the hospital idea, and do not mean to be deprived of the benefits of hospital care. So far, this is good.

Sober second thought, however, discovers some rather formidable questions in this staggering mass of figures. How much of this vast hospital investment has been wisely made and how much of it is destined to be a dead weight on the development of the future? In how many cases have the needs of the community been carefully surveyed before the hospital was even planned and in how many cases has the plan scarcely gone beyond the feeling, "A hospital is a good thing. Let's have a hospital." A two-hundred-and-fifty-bed maternity hospital is erected, and by the donor's will devoted in perpetuity to this single use, in a community in which the total annual births would never keep the beds filled; a four hundred-and-fifty-bed epileptic colony finds less than a hundred inmates; and meanwhile other institutions are forced to turn patients away. Here and there is a general hospital equipped with an elaborate and costly operating room, but inadequate laboratory facilities, in a community in which surgical cases are few but cases of typhoid and malaria abound. Hospitals to this extent victimized by the misdirected benevolence of their founders are rare, it is to be hoped; yet, on the other hand, the idea that a hospital is a hospital is so general that hospitals carefully adapted to the needs of the communities which they are intended to serve are probably not very common. Everyone realizes that a shoe may be very well made, of the best material, and according to the best designs, yet totally unsuited to the size and shape of a given foot and to the use desired. The principle that a hospital should be as carefully fitted to the needs of a community as a shoe is to the foot is so new, however, that probably in the majority of instances, when a new hospital is to be built, a well-meaning contributor or local committee sets out to collect "ideas" from hospitals held up as models, giving only secondary thought, if any, to the question whether these hospitals are adapted to the same local needs.

A second consideration emerges from the examination of the figures above referred to. The total hospital bed capacity of the country has increased enormously, yet relatively much less than the number of institutions. The average number of beds to an institution in 1873 was 238; today it is a little over 98. Moreover, the absolute size of the large hospitals has increased also. Mount Sinai, New York, for instance, in 1868 could "accommodate about sixty patients comfortably"[1]; its present capacity is 500. Pennsylvania Hospital in 1867 had 155 patients; it now can take care of 315. Since the increase in the total number of institutions has been great relatively to the increase in total bed capacity, and since the increase in the bed capacity of the large institutions has been absolutely great, therefore, it fol-

[1] Cammann, Henry J., and Camp, Hugh N.: The Charities of New York, Brooklyn, and Staten Island, Hurd and Houghton, New York, 1868.

lows that the increase in number of small institutions must be enormous, and that the vast majority of hospitals in the country must be well under one hundred beds capacity. Furthermore, the idea of making a survey of the community before building a hospital, has found lodgment, if anywhere, in urban centers, and application to the foundation of large hospitals. A large institution can afford to employ a hospital expert, or a corps of experts, to make preliminary surveys before the plans are drawn. This is obviously out of the question for rural communities and small hospitals. The consequence is that, though small hospitals are in the vast majority, there is almost no collected and organized knowledge of their needs, particularly the fundamental needs concerned with their relation to the community.

The moral seems to be twofold: In the first place, there is still need for missionary work in spreading the hospital idea, but this missionary work needs to be directed now, not so much to convincing people of the value of hospitals as to teaching them the necessity of measuring the needs of the community before building or even planning a hospital. In the second place, since small hospitals so greatly outnumber the large institutions, and since cross-roads communities will never be able to command the service of high-priced hospital experts, the crying need of the hospital situation today seems to be for an investigation of the hospital needs of various rural communities, with a view to discovering some general principles which may be applied in any specific instance. In no other way, apparently, shall we solve one of the most important, if not the most important, hospital problem of the present day.

A Noteworthy Measure for Promoting Dispensary Efficiency

A certain hospital has posted on its walls the following motto:

"Who is to be considered first in this hospital? *The Patient.*"

Of course the patient is the first consideration in every hospital that is worthy of the name, one naturally thinks. What else is the hospital for? Is not the welfare of the patient the whole object of the institution? Or can it be, after all, that the cure of the case sometimes obscures the welfare of the patient? For the cure of the case and the welfare of the patient are not always precisely synonymous terms.

In a dispensary, for instance, where, as Dr. Edwards A. Park observes, it is generally assumed that it is better for many patients to lose an aggregate of hundreds of hours than for the physician to run the risk of losing a few minutes,[1] it may well be questioned if the welfare of the patient is the first consideration. For, to the very poor, even when medical service is provided free, it often becomes a serious problem whether the physical trouble is a worse ill than the loss of time and wages necessary to get it treated.

It is a very hopeful fact that the simple common-sense device of making appointments for dispensary patients, just as if they were private patients, thereby saving the time which wage-earning people can so ill afford to lose, has been found to work out satisfactorily for dispensary physicians, whose time is, in fact, conserved rather than wasted thereby. Although Dr. Park's paper describes work done in a children's dispensary in France, the principles which it sets forth are entirely applicable to dispensaries of all classes everywhere. Perhaps there may be other lessons suitable for civilian use in the war experiences of other hospital people. If so, we shall be glad to hear from them.

The Use of Milk In the Hospital

Since milk is now being sold at a price which is almost prohibitive so far as the smaller hospital and the families of limited means are concerned, it behooves both the hospital and the home to give a little more thought to its use. Even at the present cost, milk should not be eliminated from the diet, particularly of growing children, but we venture to say that in 75 per cent of the hospitals of the country it could be used more effectively and less extravagantly than is at present being done.

The value of skimmed milk has never been fully appreciated in hospitals. It has practically all of the food value of whole milk except the fat. Reducing the fat intake of the body to this extent will in very few cases be a serious deprivation and it can easily be made up in other ways, particularly in the diet of the nurses, interns, and employees. For cooking purposes, skimmed milk may be used with very satisfactory results. At this season of the year the fat and food accessories could, and might just as well be furnished by the use of green vegetables and vegetable oils either cooked or in the form of salads. If milk is furnished as a beverage to hospital people it can well be skimmed milk.

The difference in the price of whole milk and skimmed milk will be a decided saving if used in this way. Or if a hospital prefers to buy the

1. Park, Edwards A., and Co-Workers: The Organization of a Children's Dispensary on the Basis of Appointments for Patients, THE MODERN HOSPITAL, this issue, page 101.

whole milk and skim it, that can also be done to advantage, provided it is done properly. In following the latter method, the whole milk is available for children and other patients needing it without having a separate supply. Even in those instances where milk should be used, it may be supplemented, and thereby the amount be decreased, by a gruel of oatmeal, cornmeal, or other cereal, to which has been added a little cream, beef broth, or fruit juices. These give to the gruels a pleasant flavor and help to relieve the monotony of liquid diet, and at the same time add to the nutritive value.

The ordinary sick person requires a food which is liquid, and therefore easy to take, one that is without strong flavor, and easy to digest; the hospital requires that it be as inexpensive as possible and easy to prepare. It need not supply a large amount of nutriment in cases of brief illness or in instances where the patient may have custards, eggs, and other highly nourishing foods.

LULU GRAVES.

Two Books You Want to Know

One's first impulse, after reading a new book by Dr. Richard Cabot, is to tell some one else to read it. The blend which his writings present of ripened wisdom and friendly, companionable charm, of utter unpretentiousness and deep sincerity, is unique, so far as we know, and it seems selfish not to share it with some one else at the first opportunity. The two books now at hand, "Social Work"[1] and "A Layman's Handbook of Social Medicine,"[2] are intended for social workers, but it would be most unjustifiable for social workers to keep two such books to themselves, for both are not only delightful to read, but most helpful in the thoughtful solution of the problems of living which none of us can escape except by the unwelcome expedient of dying.

Frankness and simplicity, without a trace of professional condescension toward the layman, mark Dr. Cabot's writing. He puts on no mystic, medicine-man's robes and performs no incantations to keep the profane at a distance—in which, after all, his attitude is that of the scientist as opposed to that of the shaman. "A little knowledge is a dangerous thing," he quotes in the preface to "A Layman's Handbook of Medicine," and goes on to answer, "Yes, it certainly is. But since every body and soul in the civilized world has now been thoroughly exposed to this dangerous contagion, I know no way to reduce the risk of disaster, except by injecting into all who will submit a larger dose of knowledge in the least irritating form procurable. Gradually I hope an immunity to its dangers may thus be produced."

"A Layman's Handbook of Medicine" discusses within the compass of a little more than five hundred pages "Anatomy and Physiology," "Diseases of the Respiratory System," "Diseases of the Heart and Arteries," "Diseases of the Gastro-Intestinal Tract," "Diet—Constipation," "Diseases of the Liver and Intestines," "Diseases of the Kidney and Bladder," "Diseases of the Generative Organs," "Diseases of the Nervous System," "Diabetes," "Diseases of the Blood," "Diseases of the Bones and Joints," "Diseases of the Muscles," "Infectious Diseases," "Poisons," "Industrial Diseases—Skin Diseases," "Diseases of the Eye and Ear," "Emergencies—Home Medicine—Personal Hygiene," "Miscellaneous Ailments, Trivial or Severe." No one who knows Dr. Cabot's writings needs to be assured that, in spite of the great range of subjects covered in this book, it is neither dry and tasteless on the one hand nor cheap and slipshod on the other.

Probably some will ask what need there is for a "layman's handbook of medicine" at all. Isn't the layman better off without any knowledge of medicine except such as his family physician may think best to impart? The answer to that is partly contained in the extract which we have quoted from the preface. Most laymen do know more or less about medicine—and know it wrong. It is surely better that even laymen be immunized against gross medical superstitions and erroneous beliefs by a moderate protective dose of real knowledge. As for the family physician in the rôle of instructor, he is in the same class with the parent—theoretically the ideal medium of instruction, but actually too often a flat failure because neither nature nor training has prepared him to teach, even if his traditions did not lead him sometimes to look on medicine as a mystery rather than a science so far as the public is concerned.

"We never give people help that has any permanence in it except when we give them reality," says Dr. Cabot in "Social Work"; and that is why his books are truly helpful—because they are based on reality. Many years ago, he says, he swore off from medical lying—the benevolent, unselfish lying which physicians practice solely for the good, as they believe, of their patients. In a little book published some time since, "Social Service and the Art of Healing," he tells how he came to take such a radical step and what came of it. In "Social Work" he gives some further instances of the real tonic effect of the truth

1. Cabot, Richard C.: Social Work: Essays on the Meeting-Ground of Doctor and Social Worker, pp. 188, price $1.50 net, Boston, Houghton Mifflin Company, 1919.
2. Cabot, Richard C.: A Layman's Handbook of Medicine, pp. 529, price $2.25 ($2 net), Boston, Houghton Mifflin Company.

—of patients relieved of consuming, secret fears by the frank utterance of a truth which the physician might well have hesitated to reveal. After all, the screen which the kindly physician erects between himself and the patient may not only keep the patient from seeing into the physician's mind, but also prevent the physician from getting a true perspective of the patient's mind.

Dr. Cabot can afford to tell the truth, because he is a sturdy optimist who believes that the truth is good in itself. Even the "Layman's Handbook of Medicine" ends on an optimistic note. "Purely medical books do not end happily," he says, "but as this book is almost half human, it may well be rounded off with a consoling fact about disease, viz., *that it usually gets well of itself if given half a chance.*" Now, why shouldn't a book be nearly half human when written by some one who is quite four-fourths human?

"Carry Over"

When the history of the part played by the hospitals in winning the war is written it will be a record of no mean accomplishment, and one of which on the whole we shall have reason to be proud. The hospitals responded most loyally to the call to "carry on," more often than not sacrificing their own interests to the interests of the larger whole. Doctors, superintendents, nurses, and even whole hospitals gladly enlisted in the nation's service, and those who remained worked against great odds to maintain the services the hospitals were called upon to render.

Methods of economy were worked out and put into practice; food was saved; fuel was saved; gauze and a hundred other things were saved, savings which frequently redounded not only to the benefit of the nation as a fighting unit, but to the patients in the hospitals and to those who cared for them.

But now that the war is over and we are gradually turning our faces toward the pursuits of peace, are we not in duty bound to "carry over" into the years to come some, nay, many of the principles and practices which we learned during the trying period that we were called upon to "carry on." If it was wise economy then to save on drugs through a careful system of checking, appropriate tests and careful methods of distribution, is it any the less wise economy now? If careful technique of nursing could then be applied through the replacement of absorbent gauze with non-absorbent cotton and the use of washed and resterilized gauze, will technique seriously suffer if these and like economies are "carried over"? Dare we say that methods of food conservation worked out during the war may now be thrown into the discard as no longer applicable?

What, moreover, of the lessons in hospital construction and more important still in hospital administration that were learned by the men—laymen and physicians alike—who served here and abroad and who are resuming their places on our hospital staffs. Are we making every effort to "carry over" into the everyday life of our hospitals the lessons of undoubted value which they learned? Are we making the best use of their enlarged horizons and their knowledge born of an intense experience in order to strengthen and broaden our service? In a word, are we yielding to the temptation to slump, or are we firmly holding ourselves to a continued application of the best of the war economies and experiences?

The Winchester Hospital

One of the noteworthy things in connection with the story of the Winchester Hospital, told by the architect, Mr. Hill, on page 92 of this issue, is the fact that the building committee had the wisdom to consult the architects before purchasing the land. The experience of this hospital in the growth of the demand for maternity accommodations is general.

The block plan presents a number of very important questions. It would be interesting to know why, if Highland Avenue is the most important street, the main entrance was placed on the west side of the building, resulting in excessive (and probably expensive) drives, and the service portion of the building in the front. The physicians and all others in autos will use the basement entrance; the main entrance will only be used by visitors on foot. It is always advantageous to control the visitors as well as the doctors, by inducing them to pass the main office. There may be reasons, such as the outlook, or slope of the ground, which dictated the adoption of this orientation, but other things being equal it would seem to have been better to have faced the building around, that is, with wings to the west, or, preferably, to turn it at right angles, with wings to the south. It might have seemed preferable, also, to have the operating department so located that the patients who will be brought to and from the operating rooms will not be subject to the gaze of visitors and of the public entering the hospital through the main entrance; but the promise is made that it can be given another location in the future. It would improve conditions if a partition and doors glazed with obscured glass were built to separate the lobby from the main corridor.

OCCUPATIONAL THERAPY, VOCATIONAL RE-EDUCATION AND INDUSTRIAL REHABILITATION

Conducted by DOUGLAS C. McMURTRIE, *Director Red Cross Institute for Crippled and Disabled Men* and ELIZABETH G. UPHAM, *Advisor in Occupational Therapy, Milwaukee-Downer College.*

OCCUPATIONAL TREATMENT FOR THE INSANE

Dementia Precox Patients Show Improvement—State and Institution Benefit as Well as Patient—Work Promises Still More for Future

By CHARLES F. READ, M.D., Superintendent, Chicago State Hospital, Dunning, Ill.

Over 50 per cent of the patients in the state hospitals of Illinois, or of any other state for that matter, are cases of dementia precox. The salient feature of this type of mental disorder is a loss of interest in the things that serve as spurs to normal activity—desire to get on in the world, love of home and family, outside social interests, etc. Fantastic ideas and bizarre activities take the place of these sane interests, and the affected individual ceases to make the adjustments necessary to retain his place as a member of the family and of society at large. He gets out of step with the mass of his fellows; depends more and more upon his own delusional resources; contents himself with poorer and poorer ways of doing things; and in the end, if allowed to go his own gait, suffers a more or less profound deterioration.

Accompanying this mental degradation there is no corresponding physical decay, and, as a result, the precox patient who enters an institution at twenty may very well continue to exist there until he is seventy. At least 20 per cent of all commitments belong to this group, and, since so few die and so few recover (possibly 10 per cent), a balance between the incoming and outgoing is not struck until at least half of the entire hospital population consists of this type.

This sad statement is an admission of the fact that dementia precox remains the sphinx of psychiatry. We do not know the cause, although we may speculate upon it; finding no definite brain lesion, we can have no specific therapy. We can only do what has empirically proved to be successful.

Fig. 1. Bookbinding and basketry are taught in the occupational center.

The fact that occupation is good for disordered minds has been very definitely known for many years. Of necessity, the bulk of the routine work about a state hospital has always been done by patients under the guidance of employees. The majority of these workers are dementia precox patients and, as a rule they do not deteriorate beyond a certain point. They form the backbone, so to speak, of the hospital organization. They are interested in what goes on about them; they take pretty good care of themselves; they appreciate entertainments; and not a few are paroled home from time to time.

Here it is, then, that we seem to have the secret of some sort of treatment for this type of disorder and for many others as well. Occupy these people; give them back a definite interest, even though it be but a petty one compared with what they have lost. By this means furnish them a snug harbor where they may find anchor in place of drifting helplessly before the shifting winds of fantasy on a trackless waste of inactivity. We cannot expect a cure in very many cases but we can hope to make out of the former college instructor a fair hand at raising chickens; out of the stenographer, a good seamstress, etc. What has been thrown overboard in the storm of the acute psychosis can not be entirely replaced, but something can be salvaged and final shipwreck avoided in many instances. To accomplish this result in a great mass of patients—we have at least sixteen hundred precox cases in the Chicago State Hospital alone—it is obvious we can not depend entirely upon industrial occupation since this presupposes a remnant of initiative in the patient sufficient to permit of his employment under rather haphazard conditions. To be industrially effective he must apply himself to his appointed task with comparatively little guidance, once it is set plainly before him.

Fig. 2. Manual training for the insane at Dunning, Ill., brings decided improvements in patients' condition.

To create purposeful activity in a patient too indifferent to do any work of his own initiative is quite another mat-

ter and requires, in a large institution, a considerable organization and a definite program.

In the spring of 1918 the Department of Public Welfare of Illinois appointed Mrs. Eleanor Slagle, of the Favill School of Occupations, part-time director of occupational therapy throughout the state. In April a department was opened at the Elgin State Hospial and in June, at the Chicago State Hospial. Women of experience were secured as superintendents and voluntary workers were supplied from the Favill School of Occupations, women who had taken a two months' course of training in the school and were to round this out with three months' field work in a general hospital and in an institution for the insane. These women were college graduates, already trained to quickly grasp and assimilate new ideas and methods. The majority of them were pledged to government reconstruction service when called, and, at this writing, practically all of those who have completed this field work are in

Fig. 3. An old case of dementia precox making a hook rug.

government hospitals. Under the direction of Mrs. Slagle and the guidance of Mrs. Burns Tompkins, formerly of Danvers State Hospital, Mass., as superintendent of the new department, the work was rapidly organized at the Chicago State Hospital. A superintendent was placed in charge of the entire department, and an assistant (male) in charge of calisthenics, gymnastics, games and folk dances. Volunteer occupational therapists varying in number from six to ten (the students referred to above) gave their services, together with a few paid workers, to teach the patients upon the wards and in the occupational center.

The patients are prescribed for by the ward physician and placed at suitable occupations in classes in the receiving cottages and upon the observation and the deteriorated wards (six in all at present), where they cut out toys with coping saws and sandpaper and paint them; make reed baskets; weave netting; do beadwork; make hook rugs; construct dolls and dress them, etc. Over seven hundred patients passed through these classes during the first year.

Each group attends class in the morning and calisthenic exercises in the afternoon, or vice versa. Some patients must even be taught again the use of their hands, having apparently lost or mislaid the power of muscular coordination. Others can perform only the simplest movements such as sandpapering, unraveling tea matting, spool knitting, etc., and these for but short periods of time at first. Some can not even be persuaded, in the beginning, to do anything at all, but are allowed to sit near others who are working until they themselves in turn become interested or more susceptible to persuasion.

Fig. 4. A beginners' class in calisthenics. After a time they do much better than this.

Not all the patients handled in this way are dementia precox subjects. One of our most interesting cases, one of depression, was that of an Indian whose recovery was undoubtedly advanced several weeks or even months by occupational therapy, first in the ward class and later in the occupational center. Another similar case is that of a patient who is almost ready to leave after several months' treatment, though, in justice to the hospital ward, it must be said that in the earlier stage of her depression her life was saved by forced feeding and normal salt injections. In the receiving and observation wards it is the rule to bar out no patient on account of age or psychosis. The majority of these acute cases have been torn up by the roots, as it were, and rudely transferred from an active life to the deadly monotony of hospital care. If occupation were to do no more than serve them as a pastime during this period it would be of service. As a matter of fact, it accomplishes much more than this. The average patient begins to occupy himself immediately after admission and in so doing, not only retains what habits of industry and normal thought still remain, but gradually adds to this interest. Slowly he learns again the lesson of orderly achievement, learns to control his energy and accomplish little tasks. Having learned the lesson in a small way, he is the better fitted to undertake larger tasks and may ultimately find himself again fit for the complicated problem of getting along in the outside world.

When the patient has sufficiently improved in the ward class he is promoted by the physician and goes to work in the occupational center—formerly an old power plant. This building in itself is a good example of reconstruction

Fig. 5. The carpenter shop, built at small cost in the old power-house gives employment to many.

work. One by one during the past few years the fires beneath its boilers have gone out until a year ago last spring when, finally supplanted by a new power house, then the need arose for a building to be used in

Fig. 6. Woodcarving is among the crafts which mental patients can learn.

connection with the new department, and the forlorn old building was seized upon as the only one available. The old engines and pumps were moved out, and, at an expense not exceeding five hundred dollars, we transformed a three-story wing into a very decent and hygienic place. Then the occupational therapists moved in, wrought a further transformation, and converted the place into a delightful workshop with looms, hand weaving and rug-making on the upper floor; basketry, wood carving, painting, bookbinding, and a library on the second floor, and a manual training and carpenter shop on the first floor. This summer we shall make out of the adjoining old boiler room, a first class gymnasium—about four hundred patients pass through our calisthenic and dancing classes each day—and before winter the old coal bunkers will be turned into a pottery and cement shop.

Good friends—and it is remarkable how many there are of them who are interested in this work—have given gymnasium equipment, playground apparatus, a pottery kiln, a library of five hundred volumes, etc., and now still another proposes to set up a roof garden on the flat roof of the gymnasium, if we can make this stout enough to bear the weight.

Private gifts have, however, merely supplemented the state's generous support. The department has cost in wages and material between four and five thousand dollars the first year, and, during this period, over fourteen hundred working days have also been given by the voluntary aids doing their field work here.

Whether it has paid or not, the reader may judge from this brief recital and from the few cases there is space to describe here. They are given practically as reported in the notes made by their instructors.

The following concerns a ward of women, dementia precox cases, much deteriorated, one-third of them untidy to begin with and all very unpromising cases:

April 19, 1919.—The class is with one exception clean in personal habits. Many of them do not have to be told to wash their teeth. They wear their shoes and keep them laced.

Esther —, no longer has to wear a strong dress. If I wear something a little different she always notices it and speaks of it. When the class started she was not allowed to go on the lawn nor to the gymnasium with us because she would tear her shoes to pieces. Now she knits and crochets and does other handwork very well.

Fannie —, a few days ago cried and refused to work. When asked why she was crying and why she would not work, she said she would not work in "such a dirty dress." Her dress was changed and she worked well all the morning.

Hedwig —, is making an embroidered pillow top and is enjoying it and always telling us how beautiful it is. It took many weeks to get Hedwig into the class and for a long time she would only cut paper.

Lincadia —, has developed much and is brighter in what she says and does. She is making dolls now and dressing them and doing it very nicely. She has also pieced a quilt.

La Hodney —, is not so profane as she used to be, although she still has bad talking days. After she is spoken to she usually stops talking and does her work. When she came into the class the top of her head was also bald where she had kept her hand or arm on it. Now her hands are kept busy and she has a beautiful growth of hair. She, too, is making dolls and dressing them. She knows everything that is said to her and sees everything that goes on. She is the leader in her gymnasium class, helps get work ready mornings; loves to be dressed up.

The following are notes upon cases that have been advanced to work in the occupational center:

Agnes —, dementia precox, at first sat around on the ward and appeared to be listening to hallucinations, though she denied this. She was careless regarding dress, apparently indifferent, and quite childlike in action. When started upon work she had practically no use of her hands. It was weeks before she was able to catch a ball or to follow the simplest movements in the gymnasium. Now she can follow the exercises and take part in simple dances. In handwork she has been very much interested in the making of a bead chain and has done it well; she is very quiet and talked only when asked questions until recently, when she has several times voluntarily asked a question.

John —, dementia precox, at first was careless and indifferent. He frequently took off his clothing; did not talk connectedly and at times not at all. At times he had to be fed and when transferred to CW15 he would not go to the general dining room but would remain on the ward. When he started in the gymnasium class the exercises and games had no interest for him. He first became interested in playing ball when the class was out on the lawn and soon became interested in all the gymnasium work. He started making some very simple toys, but was not able to do any constructive work; displayed interest in painting but continued to have spells of indifference at intervals of about a month apart. These spells gradually became much less frequent and of shorter duration, and he has not had one now for four months. At present he is intensely interested in building a five-room doll-house and does beautiful work. Shows a great deal of originality and initiative. Much neater in personal appearance. Reacts occasionally to voices.

John —, dementia precox, at the time he first entered the occupational class, was very untidy and would not dress himself. For weeks he would not do a thing, simply stared into space. It was necessary to give him individual work in gymnastics. After about three months he would follow a few of the simplest arm movements, and, a little later, he started looking over the work given him to sandpaper. He began whistling a little at his work although would never speak. When transferred to CW10 he became interested in "hooking" a rug and was soon able to follow all the exercises in the gymnasium and enjoy a game of ball. He worked steadily for three months on CW10 in the occupational class, gradually improved, and became more interested in his work. Recently he was transferred to the painters' detail and is working with it at present.

Bolislaw —, dementia precox, when he first entered the occupational class, could only with great difficulty be induced to work. He was very nervous and confused, an-

swered no questions, and did not seem to comprehend what was said to him; constantly prayed, crossed himself, or got up from his work to come over to say, "Forgive me, nurse." He became interested in rake knitting and worked faithfully, but lacked initiative. He works at the occupational center now doing painting, seems interested in his work, and comprehends what is said to him or expected of him. Gets out his own work and cleans up without being told. Physical as well as mental condition is improved. Has at various times asked questions and can carry on an intelligible conversation.

These cases represent more or less successful results. There have been many failures as well. We must not be overly sanguine concerning the effects of occupational therapy. It is not a cure-all; but results like these are well worth while. Even though a small proportion of the patients can actually be returned to home and society, many of those who remain will be fitted to lead more comfortable lives and less time, money, and trouble will be required to care for them, once they are re-established upon a higher plane of thought and conduct.

To accomplish the best results occupational therapy must work hand in hand with constant training in habits of cleanliness and orderliness. Especially is this true upon the more deteriorated wards. Thus far we have been able to establish programs covering the activities of the entire day upon only two wards, one for men and one for women, and here much has been accomplished though not all that we could wish or reasonably hope for if we were able to secure more employees.

A final word should be said for the effect of this new department upon the morale of the entire institution. Already an improvement not entirely confined to the patients has been noted. The humanizing leaven is at work and, if a few manifest dangers can be avoided, in time the entire group of patients, relatives of patients, and employees will be raised to a higher level of hope and helpfulness.

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THE LIMB-FITTING HOSPITAL AT ROEHAMPTON

Tilting Table Leg and Adams Arm Among the Most Remarkable Mechanical Devices—Thorough Training in Chosen Line Complete Soldier's Restoration to Industrial Efficiency

Captain E. A. Hackett, the representative in France of the Red Cross Institute for Crippled and Disabled Men, recently made a visit to Great Britain and visited the great military limb-fitting hospital for amputation cases at Roehampton, just outside of London.

The hospital has accommodation for a thousand patients and is constantly taxed to its capacity. Assuming some of the general facts regarding the institution to be well known, Captain Hackett writes his observations regarding several specific features.

Tilting Table Leg.—Made in shops on the hospital grounds. This leg has a knee articulation that is practically automatic. The control is by suspension over the shoulders but without need of the patient exercising any direct effort in the management of the limb. "This feature is used on limbs from what are called trunk amputations, I believe, which leave no stump on the lost member. Another feature of this limb is a locking device. I talked with several men who have lost limbs in the war, and are now employed by the Limb Company at the hospital shops, and found that the men fitted with these limbs were doing a full day's work, on their feet practically all the time. The value of this limb is about $110."

Adams Arm.—This is an automatic arm, practically of the same appearance as the usual types. Its special feature is a detachable hand, the removal of which permits the attachment of a wide variety of general and special sockets and holders for tools. The hand is detached at the wrist for light work, and another separation is possible, in the latest type, effected by a conical stiff socket, operated from the side of the arm by a small lever. This second point of separation is just forward of the elbow, and by means of it much shorter leverage can be obtained than through the hand joint; thus the one arm serves for light shop work, and by detaching at point forward of elbow, the wearer is able to adjust much heavier tools and implements without the physical fatigue and risk of breaking his arm, which would be apparent if the heavier tools were attached at the wrist. The cost of this arm is also about $110.

Morale.—The colonel in command of the hospital says that with the present more definite arrangements understood by the men, there is no fault to find with their morale.

Employment.—While the war was going on every effort was directed to get the men fit for some branch of war work, principally munitions, because of the labor conditions, but at the same time the need of education for permanent post-war employment was kept constantly in mind.

Selection and Placement.—The plan followed in the preliminary training given at this hospital is to try to find the class of work the individual can best be fitted for, and to this end instruction has been given in a number of lines. In fact, courses have been open to the men in some lines that they have not taken up in sufficient numbers to justify retaining the course. The colonel says that the men will not touch farm work as a basis for ultimate permanent employment, nor will they take up any line of instruction that savors of personal service.

Left-Hand Copy Book.—There is used here a special copy book for teaching maimed soldiers to write with the left hand. The tutors at the hospital say they have had great success with it, and that with many men it fits in especially well during the long waits necessary to obtain proper fitting of artificial members.

* * * *

Blind Soldiers Keep Posted on the War

Blinded soldiers may keep informed on the war by especially prepared books and maps. Strange to say, the blind themselves prepare these books for their comrades.

Western Newspaper Union Photo Service.

A blind man putting in the battle line on a plate to be printed for the blind.

DEPARTMENT OF DIETETICS

Conducted by LULU GRAVES.

Please address items of news and inquiries regarding Department of Dietetics to the editor of this department, Home Economics Building, Cornell University, Ithaca, N. Y.

THE DIETITIAN AS COADJUTOR OF THE PHYSICIAN*

A Hospital Kitchen Without a Trained Dietitian Like a Locomotive Without an Engineer

By HUGH PAYNE GREELEY, M.D., Madison, Wis.

It may be truly said that a hospital kitchen without a dietitian is like a locomotive without the engineer. There is plenty of food in one case and plenty of steam in the other, but the energy in them is wasted unless properly directed. A locomotive with an engineer and a fireman is an efficient instrument of service but they need an organization higher up in order properly to serve the public. In the same way a hospital kitchen plus a dietitian is an efficient instrument of service, but needs in fully as great a degree the intelligent staff of physicians in order to serve patients properly.

In the past, a great many hospitals have been run without dietitians. In this case the physicians or the hospital superintendent did the work of the dietitian, or too often it was left to an untrained cook.

We are glad to be entering this new era in which the physician may have the intelligent cooperation of the trained dietitian. In well-organized hospitals today, the physicians cannot adequately administer this work without help. Dietitians are, or should be, trained to give this help. They bear the same relationship to the physician as the pharmacist does. He fills the prescription. But success requires a great deal more than technical training. The successful pharmacist does not just throw the ingredients together. He prepares his drugs carefully, compounds his prescription accurately, and then dispenses it as tastefully and neatly as it can be done. And he must also exercise economy. The same thing applies a hundredfold to the dietitian. Food represents calories, but should not be served as such. Economy, care in preparation—both as to quality and balance—and in serving are the important things to consider. A dietitian is selling goods in the same way that the pharmacist is, and she must sell service as well.

For a long time the dietitian was accepted rather reluctantly by the hospital board of trustees. The hospital dietitian had rather to force her way along and prove her worth. She has not always made good, so that her employment has often failed to produce the good results that it should. Her failure is not always her fault—for hers is not an independent profession. Coming into the hospital organization under sufferance, having to prove her own value to the hospital, she has seldom been given the power necessary to develop herself and the job as it should be done. Without broad power, her function resolves itself into the work of preparing special diets, which is, to be sure, important and necessary work, but work which is after all restricted to a small number of patients.

There has been further difficulty in the path of the dietitian because of the failure of the hospital staffs of physicians to impress upon the trustees the necessity for conferring broader power on the dietitian. This cooperation between physicians and dietitian is manifestly impossible in all hospitals in which there is no unified medical and surgical staff. Therefore in many small hospitals the proper sphere of action of the dietitian is greatly restricted and hampered. A hospital cannot be efficient in this respect without a unified staff. The dietitian and the medical staff are responsible for the hospital dietary. When we consider that the average daily cost per patient in a modern hospital is from $3.50 to $4.50 a day, and when we realize that fully one-third of this sum is spent for food, we can see that this divided responsibility is a highly important one.

Since the medical staff and the dietitian are responsible for this dietary which represents one-third of all hospital expenses, as long as people are unwilling or unable to pay hotel prices for hospital care, it may be impossible to cater to patients' individual tastes to any degree. The result will be that the vast majority of patients must have served to them a standard diet. In a city of mixed population, one can readily see how difficult it is to serve foods equally suited to separate individual tastes. It would be ideal if the American people could have a standard American diet. After many centuries of education, we will probably work out such a utopian idea, and then the hospital dietitian's path will be simplified. At the present time we have to take the situation as it is, and in order to do the work well, the unified medical staff should meet with the dietitian and plan a few standard diets—just as few as possible. These diets should be based on principles of nutrition, and so far as consistent, on accepted *habits* of eating. It is often of the utmost importance that people's habits should not be suddenly interrupted. When these standard diets are compiled, they should be issued to the medical staff so that they could all cooperate in simplifying the work and avoiding waste.

As I look upon it, the success of the dietitian of any hospital lies in her having broad power; in her being well trained technically, and also as an administrator; in being a person of common sense; and in her having the definite cooperation of a unified medical staff. What makes her a failure today is this lack of direction higher up.

The profession of hospital dietitian should be one of indispensable benefit to modern medicine as well as to modern hospital organization. The food problem of a modern hospital is as difficult and as important as any problem which the hospital trustees have to face. It is one which will require all their business acumen to solve. Too many hospitals in the past have been run on a diametrically opposite plan from that of the successful hotel, whose motto is, "The guest is always right." The attitude of many highly organized hospitals often seems to be, "The patient is always wrong," or "Take what you get and be thankful and cheerful. Don't express an opinion. Patients shouldn't have opinions." The hotel plan proves a financial success; the hospital plan is almost always a financial failure. There are, of course, many other factors which contribute to this failure, but there are also factors which should partially at least counter-

*Paper read before the Annual Conference of the Institution Section of American Home Economics Association, Madison, Wis., June 13, 1919.

balance them. The hospital gets a lot of its most expensive service gratis.

Now it is the business of the dietitian, the medical staff, and the trustees, to work out a successful compromise between the hotel plan which is a success, and the hospital plan which is a failure. We ought to work out something which will at least enable us to come out even and which will be a great improvement upon the imperfect service that exists in many hospitals today. I firmly believe that some patients in hospitals ought to have a menu privilege. This would not necessarily add to the work, and it would add enormously to the attractiveness of a place that has all too few attractions. We are still combating the old idea that the hospital is the place to go when you are going to die, not the place for the best and most comfortable treatment—and what is still more frequently heard and something that cannot always be refuted is, "I would go to the hospital, but you can't get anything fit to eat there."

The problem of the best management of a hospital dietary is still an unsettled one. But one can readily see that the dietitian is the keystone in the arch. She is the go-between between the physician and his patient. She occupies a position that requires more than good training. It rests upon a thorough understanding of food principle, upon a practical knowledge of cooking, upon thoroughgoing common sense and good administrative ability, as well as tact and enthusiasm.

There is another type of dietitian, however, whose importance is not recognized and whose sphere of action is at present limited, and that is the nurse qualified as a dietitian. The time is surely coming, I hope, when people who command $25 to $35 a week, will be even more highly trained than they are today. Nothing will ever justify the present exalted position of the nursing profession or put it on its proper footing, until it adopts the academic standard.

The opportunity for service and the emolument of nurses should immediately demand this step. Every trained nurse should be enough of a dietitian to be able to fill dietary prescriptions at the patient's home as well as the pharmacist does a drug prescription. The future of the nurse as dietitian in the home will be an increasingly great one. Do not think for a moment it is lowering the dignity of the dietitian. It would be raising the profession of nursing.

As with any new profession like that of dietitian, it takes a generation or so to get it properly adjusted in its niche. Practical details can only be worked out through experimentation and finally perfected. All this takes time. Meanwhile, the stress is apt to be put on the theory, and if I were to make a criticism, it would be to say just this—that the training today is overloaded with the theory of metabolism and nutrition, and perhaps too little attention paid to the perfecting of practical details of the hospital dietary. The science of metabolism is also young, and what seem to be facts today are fable tomorrow. The treatment of metabolic disease is only a very small part of medicine, and though an important one, occupies, I feel, an exaggerated place in the training-school today. However, these faults are faults of youth and are not what chiefly hamper your profession today. What we need is the recognition by hospital trustees that the dietitian is not only necessary to the physician, but pays her own salary many times over in the more efficient and economical management of the hospital kitchen.

Physicians are every year more eager to welcome you as indispensable and permanent agents in the organization of modern medicine.

A PRACTICAL FOOD CONVEYOR

A Device Which Keeps Hot Things Hot and Cold Things Cold Satisfactorily Installed at U. S. Army General Hospital No. 1

One of the most difficult problems confronting hospitals and other institutions is the conveyance of food from the kitchen to the various parts of the house. The question is not so much the transporting of food from one point to another as it is the condition of the food when it is served. State or municipal institutions or others occupying several buildings cannot serve "hot things hot and cold things cold," if they have been carried long distances through corridors or open spaces or both unless special attention is given to this service.

The system described below, which was installed at U. S. A. General Hospital No. 1, New York City, by Lieut.

The Eclipse food conveyor designed by Lieut. Frank D. Van Vechten, mess officer at U. S. Army General Hospital No. 1.

Frank D. Van Vechten, gave very good results. Fifty-five wards were served, some of which necessitated traversing a distance of about 3,000 feet. Lieut. Van Vechten, mess officer at the hospital, designed the containers and truck illustrated. He found it kept the food satisfactorily hot, and at the same time simplified the delivery, requiring less time to deliver food to the wards and fewer men to handle it.

The advantages of the device comprise ample capacity, ease of operation, convenience of service, and substantial construction.

The total capacity is 60 quarts. The covered containers provide easy loading space for twelve food boxes, each with a capacity of 5 quarts; they will nest together making the load easy to handle, compact, and permitting little or no loss in heat from the food.

The contents of one container will feed fifty or sixty patients.

Large rubber-tired wheels render its use noiseless. There is complete loading space for nine conveyors, which will feed five hundred patients, by the efforts of one person in the delivery of the food for each respective ward. The four-wheeled truck may be turned on a short

radius and operated with little or no effort. The truck is supplied with two swivel steering wheels that will stand up over long stretches, as well as cross-board corridors. The body of the truck is so arranged that it is easily loaded, constructed to a level such that the containers may be loaded, without slopping of food and liquids.

The truck may be rolled into the ward if desired, or into the ward kitchen, the food served hot, directly, as from a steam table. At the conclusion of the serving the containers and food boxes are cleaned at the ward kitchen, and returned to the source of supply.

The truck is of a construction that will stand hard usage. The body is of angle iron frame with joints which are securely welded. The truck is sanitary throughout, and inviting in appearance. The food containers are made of heavy block tin, with drop handles, and fitted with a drop cover which is dust-proof. The containers are fitted with twelve food boxes, each with a capacity of 5 quarts. There are no corners in the body construction; the containers are double-seamed and are easily cleaned. By the testing of the foods or liquids, it has been proved beyond question that they will retain heat.

There is no insulation required. The accompanying tabular report demonstrates that the conveyors retain heat to a desired temperature for serving.

REPORT OF TEMPERATURE OF FOOD SERVED FROM CONVEYOR.

Truck No.	Food	Start Time	Start Temp.	½ Hour Time	½ Hour Temp.	1 Hour Time	1 Hour Temp.	1½ Hour Time	1½ Hour Temp.
A	"	11:30 AM	75°	12:00 AM	68°	12:30	64°		
B	"	11:35 AM	72°	12:05 AM	67°	12:35	65°		
C	"	11:40 AM	77°	12:10 AM	70°	12:40	61°		

The body of the truck is 52 inches long, 32 inches wide, and 61 inches high from the floor. The wheels are 10 inches in diameter with wire spokes and rubber tires. The total capacity is nine containers, each with food capacity for sixty patients.

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Conference on Food and Nutrition

A conference on food and nutrition was held at the Johns Hopkins Medical School in conjunction with the meeting of the Federation of American Societies for Experimental Biology, April 25, 1919. There were present at this conference Drs. C. L. Alsberg, H. C. Sherman, Graham Lusk, W. J. Gies, R. G. Hoskins, H. P. Armsby, S. R. Benedict, I. Greenwald, E. B. Meigs, S. C. Prescott, C. F. Langworthy, A. D. Emmet, P. A. Shaffer, A. R. Rose, K. George Falk, V. C. Myers, E. J. Cohn, C. N. Frey, J. F. Brewster, F. H. McCrudden, Andrew Hunter, N. R. Blatherwick, H. A. Mattill, Paul E. Howe, W. A. Perlzweig, W. N. Berg, R. J. Anderson, H. H. Hanson, and Misses Lenna Cooper, Ruth Wheeler, Lulu Graves, and Isabel Bevier and Mrs. Mary Schwartz Rose and Mrs. Norton.

Dr. H. C. Sherman was elected temporary chairman, and Dr. J. R. Murlin temporary secretary. The secretary read a brief address, expressing from the point of view of the Division of Food and Nutrition, Medical Department, U. S. Army, the need for continued organization in the interests of good food, and good nutrition for the public welfare. This was followed by a statement by Dr. C. L. Alsberg regarding the function of the Bureau of Chemistry, Department of Agriculture, and the work which it is authorized to do.

A statement was made by Dr. C. F. Langworthy regarding the functions of the Bureau of Home Economics of the U. S. Department of Agriculture, and the authorizations under which it operates. A motion was passed that the chairman appoint a committee which should have power to consider further what form of organization should be adopted to further the education of the public on matters of food and nutrition. Miss Bevier and Drs. Langworthy, Sherman, McCollum, Mendel, Lusk and Murlin were appointed as a temporary committee to consider further the question of organization. John R. Murlin was appointed secretary and temporary executive officer to conduct further correspondence on the subject.

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NEWS NOTES OF DIETITIANS

Miss Edith Lincoln, one of the dietitians who did such good work at Fort Riley, Kansas, is assistant dietitian at Massachusetts General Hospital, Boston.

Miss Ruth Olsen recently finished student dietitian training at the Minneapolis City Hospital and is now dietitian at the Luther Hospital, La Crosse, Wis.

Miss Florence Wikle, formerly dietitian at Monmouth Memorial Hospital, Long Branch, N. J., is in charge of the dietary department of Lenox Hill Hospital, New York.

Miss Belle Haggerty, who was formerly at San Francisco General Hospital, came East early last winter in order to get in touch with the work being done in the dietary departments of hospitals on the opposite side of the continent. Miss Haggerty spent some time in Philadelphia, then later visited hospitals of New York and Boston, she has now returned to the Pacific Coast to help in equipping the kitchen of the new Alameda County Hospital, which is being built in Oakland. The plans for the service building of this hospital are exceptionally good. The dietary department under Miss Haggerty's supervision promises to be superior to any in the West.

Dispensaries of Social Hygiene for the Prevention of Tuberculosis

E. R. Coni, in the *Semana Medica* of Buenos Aires, discusses the law which provides for the creation of the following institutions: Public dispensaries, dispensaries established by associations, private dispensaries, dispensaries organized by communities and districts, and obligatory dispensaries. The first are the most important as they are supported by the state. Obligatory dispensaries are those which must be established in any community or district if the mortality from tuberculosis exceeds the average mortality from this disease in France. If the community neglects to build the dispensary within specified time, the state authorities select a place and erect the dispensary at the expense of the community.

Hospital Conditions on the East Coast of Sumatra

The work on the plantations of the East coast of Sumatra requires a large amount of foreign help. Coolies from Java, China, and British India are imported for this work. In such a population the danger from infectious diseases is always serious, and in times past the mortality has been very great. Recognizing these conditions, the Dutch government erected thirty-three fine hospitals in the territory, all of which are built on the pavilion plan and are substantial one-story structures.

They are provided with excellent laboratories for the diagnosis of the various tropical diseases. Although in operation only a few years, their influence on general morbidity has been most beneficial. The mortality from tropical and infectious diseases has been reduced to a small fraction of the former death-rate. E. Van de Veide describes this work in the *Ziekenhuis*, Amsterdam.

HEALTH AND MODERN INDUSTRY

Conducted by BARROW B. LYONS
Superintendent Delaware Hospital, Wilmington, Del.

HEALTH PROBLEMS THAT AFFECT EMPLOYER AND EMPLOYEE

Good Health Gives One the Spirit That Creates Efficiency —Physical Examination and Employees' Hospital Secures for the Employee Perfect Health at Minimum Expense to Him

By GEORGE EDWARD PERKINS, M.D., Medical Director R. H. White Co., Boston

The present day has many problems concerning the employer and the employee. One cannot have full measure of success without the other. To make an employee successful, he or she must naturally have the proper training in his or her work, but, after all, unless the health of the employee is kept at 100 per cent, there cannot be proper efficiency. With good health one has the spirit to do things and this creates efficiency.

A machine will produce its maximum only so long as all parts run harmoniously. As is known, if one little cog becomes worn, imperfect and reduced production results. It is so with the human body. Therefore, the health of the employee is of vital importance. The employer extends to the employee the hospital department so that, through the cooperation of the employee, maximum production and efficiency may be obtained.

The employees' hospital is in charge of the medical director; the superintendent of employment and the director of education and welfare cooperate with him to obtain mental and physical fitness in the employees and to maintain them in the condition of highest efficiency.

The hospital is located in a quiet yet accessible part of the store, near the stairs and the passenger and freight elevators.

The hospital is composed of a waiting room, operating room, male ward, female ward, and medical director's office, all having outside windows and plenty of fresh air. A nurse is in charge under the direction of the medical director. Through the medical director there are affiliations with hospitals for the care of operative cases. Eye, ear, nose and throat, and nerve specialists, as well as several surgeons are on call.

Treatments at the employees' hospital are given from 8:30 a. m. to 5:30 p. m. daily. There are special hours for examination and consultation with the medical director.

Lectures on health, hygiene, care of the teeth, care of the eyes, etc., are given from time to time.

The functions of the medical department of the department store are peculiar to itself and far-reaching. We anticipate in the near future the examination of all employees at the time they are hired and at intervals during employment. This eliminates defectives who would be a menace to the store and by this elimination cuts down the turn-over of help. The employee whose defects would allow him or her to be placed in certain positions without detriment to the store production can be placed by the superintendent of employment, after consultation with the medical director.

Eye examinations will correct the defects of vision and will save many errors, besides saving the loss of time from headaches and digestive disturbances.

Examination of the teeth will correct digestive disturbances and overcome objectionable features in the personality of the employee.

Examination of the heart and lungs will make it possible to correct abnormal conditions in the early stages.

Examination for varicose veins, hernia, etc., will give information for the placing of the employee in proper positions and protect the employer against suits for compensation when the employer is not liable.

The physical examination will be of the greatest value to the employee, as perfect health is obtained at a minimum expense to him.

At the present time, in our hospital, accidents and infections are well treated in the shortest possible time after occurrence, and the absence from work is cut to a minimum.

By means of records of absentees we hope that the working conditions will be improved to overcome occupational ailments and that advice may be given regarding rest periods, proper medical care, and vacations. In other words, we hope to improve conditions so that the employee is made and kept fit.

The statistics furnished by records kept in this way show the prevailing ailments and causes of absence. If we know the causes of absence, steps can be taken to remedy them and a healthy, happy, cooperating, efficient body of employees maintained.

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AN INDUSTRIAL CLINIC WITHOUT RECORDS EXCEPT IN ACCIDENT CASES

The Experience of the Pioneers in Health Welfare Work —Greatest Reason for Success of Clinic Is Fact That No Records of Medical Attention Are Kept

By C. E. COYNE, Assistant Executive Secretary, Filene Cooperative Association, Boston

The medical clinic of Wm. Filene's Sons Company was established fifteen years ago at a time when the establishment employed about six hundred people. It was the first step taken by the store towards protecting the health of the employees, and was one of he pioneer clinics established in this section either in mercantile or industrial establishments.

At that time the medical director was in charge of the clinic in the capacity of director of the clinic and visiting nurse.

Since that time the Wm. Filene's Sons Company has grown into a total pay-roll of 2,700 employees and the clinic has developed accordingly, with three trained nurses now employed and a well known practicing physician and surgeon attending cases in the store and in consultation at the clinic two hours per week. He is also in charge of the administration and organization of the clinic.

An excellent example of the most efficient work done by the clinic is shown by the report of the influenza epidemic which raged in Boston for four months from September, 1918, through January, 1919. In that time, of the total number of employees, only six deaths were recorded and over 350 employees were treated per day. In all justice to the dreaded disease, all cases cared for in the

clinic were not influenza cases, but in a number of instances the person was afraid of the symptoms and all cases were given careful individual attention. Whenever the temperature was found to be a fraction above normal, the employee was sent home.

The follow-up work of the clinic is particularly valuable. The visiting nurse calls upon the employees who are ill to ascertain their condition. In no case does she interfere with the family physician who may be in attendance. However, if after consultation it is found that a specialist is necessary, arrangements are made for his services, and if it is found that there is no doctor in attendance and one is needed such arrangements are also made. Through conversation with the members of the family or through observation it may be found that the home conditions warrant a continuance of payment of salary or wages. If so it is left to the discretion of the nurse to secure same as long as it is necessary.

It is the policy of the nurses in the clinic to advise all employees who visit them or whom they visit to be insured, an activity which the Filene Cooperative Association, the employees' organization, handles themselves. The purpose of such advice is to secure insurance for all employees in order that they may receive its benefit after one week's illness. This arrangement does not place a premium upon employees being ill, and at the same time the clinic cooperates in the matter of insurance.

Probably the greatest factor in the success of the clinic has been the fact that no records are kept of medical attention except in the case of accidents, when the operation of the workmen's compensation law compels such records to be kept. The same consideration is given to employees who visit the clinic that a doctor gives to his patient, namely, that the treatment is absolutely confidential and a matter between the nurse and patient, and one in which neither the management nor the other employees should have any concern.

The clinic handles 150 to 200 cases per day, and in its attention to these cases it is a great preventive measure against illness and absence from work. Employees are urged to visit the clinic for the slightest reason, in order that colds, etc., may be remedied before more serious developments necessitate their confinement at home and extra medical attention. For this one reason alone, the clinic has a most important place in the daily work of our employees. To give some idea as to the number of accidents, which of course include a number of minor cuts and bruises, the clinic treated 1,450 employees in 1918, and 350 customers.

The attending physician and surgeon at the clinic has definite office hours of two hours per week, and in cases where medical attention is needed during the time that he is not in the store, a list of doctors who are available is kept at the clinic. A list of specialists is also kept and arrangements are made with them for special rates for Filene employees. The reason for not having a physician in constant attendance in the clinic is that the daily number of cases are of a nature that does not require a physician but can be handled by the nurses. Then, too, it would not take up all of his time and to have the man whom the firm would want, with a particularly high standing in the medical world, would be neither practical or economical.

A dental clinic is in a formative state and no doubt will be established and organized in a short time. The plan and method of administration and organization is simply in the making. It is safe to say that the dental clinic will be as efficient as our medical clinic.

In conclusion, the medical clinic has proven its value and efficiency in protecting the health of the employees of the Wm. Filene's Sons Company and its reputable standing merits the commendation of mercantile and industrial establishments whose representatives have visited and inspected it.

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WHAT THE WORKING MAN THINKS OF HEALTH WELFARE

James H. Maurer, President of the Pennsylvania Federation of Labor Points Out Some Dangers—The First Step in the Conservation of Life

The attitude which the workingman takes toward Health Welfare Work is almost as important as the attitude of his employer, and at times becomes more important. Welfare plans have been wrecked many times by the unsympathetic action of employees.

In order to get the point of view of the man in the mills toward the work which is now being planned at Washington on a magnificent scale, James H. Maurer, president of the Pennsylvania Federation of Labor, which is affiliated with the American Federation of Labor, was asked to tell how the worker felt toward free medical and surgical examination and treatment.

Few labor leaders are respected and loved by their follow workmen more than Mr. Maurer. it is fair to say that his opinion represents that of hundreds of thousands of workingmen in Pennsylvania. The editor of this department heartily disagrees with some of Mr. Maurer's conclusions, but presents his views as they were given. His letter follows:

To the Editor of the Department of Industrial Welfare:

"In reply to your inquiry as to 'what the workingman thinks of free medical and surgical examination and treatment inaugurated by certain industrial concerns,' will say that the so-called free medical and surgical treatment is in its final analysis, not free, because the expense involved is not extracted from profits but added to the product which society must pay and the workers being, in the great majority as consumers, indirectly pay for this so-called free service.

"That the plan would, however, be a great saving to the worker is self-evident, if it was not abused, but, when the company physician causes a worker to lose two weeks' working time without compensation because of a slight injury, on the plea that to remain at work might cause infection, then the worker is paying a mighty big price for the free (?) medical or surgical service. This outrage was inflicted upon many workers throughout Pennsylvania after the Workmen's Compensation Act became operative and before the demand for unskilled labor, due to our entrance into the war.

"During the year 1917, two hundred and thirty-two thousand workers were injured in Pennsylvania's industries; for different reasons many never got their old jobs back. Compulsory physical examination, to many of these people, means discrimination. The same is true of those suffering from occupational disease. If the aim of compulsory physical examinations was higher efficiency, and the placing of cripples or those suffering from chronic ailments in jobs for which they are best fitted, no one could seriously object unless the employers felt that the physical defects of the unfortunates that they employed gave them license for extra exploitation.

Concerns that demand physical examinations of those they employ seldom have in mind the placing of defectives in positions for which they are best adapted. Their aim is to get workers physically sound who can stand the speeding-up pace that modern industry demands. When broken in health, crippled or worn out, they fail to pass the physical examination and are cast upon the human scrap-heap, the present war period excepted. There are, however, shining exceptions to the common rule. I know of concerns that employ real physicians whose sole purpose in examining the employees at regular periods is to keep them in the best possible physical condition and this, to be sure, is to be commended.

"The workers are quite conscious of the fact that their earning power is, in a very great measure, dependent upon the physical condition of their bodies and are as

eager as the employers that this earning power be not impaired. But compulsory physical examinations by the employers' doctors and the plant stuck full of safety-first signs does not appeal to the worker who sees all around him unguarded machinery, pitfalls, death-traps and general all-around insanitary working conditions and whose income may compel him to live in some disease-breeding shack or tenement.

"The first great step in the conservation of human life and energy is not free (?) medical or surgical treatment, but to learn the mystery of our own bodies, tear aside the cloak of sham and modesty, learn how to live clean lives, quit driving the workers to the point of exhaustion, eliminate the profiteer, stop the exploitation of labor and there will be little need for medical service.

JAMES H. MAURER, President.
Pennsylvania Federation of Labor, Harrisburg, Pa.

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A Practical Answer to Why it Pays to Protect the Health of the Worker

The extent to which level-headed practical business men consider industrial health work a paying proposition is pointedly illustrated in a letter received by the editor of the Department of Health and Modern Industry, from Mr. L. A. Wheeler, manager of the New Departure Manufacturing Company, Bristol, Conn.:

"Our welfare work consists in helping all families where the working employee is sick or during the sickness of any of the family. I will tell you of one incident of many. This is a typical sample of our welfare work.

"A man who was laid up for four weeks (a foreman of one of our important departments), and the local doctor did not seem to know what to do. The doctor was treating him for rheumatism, but the case got so bad that I had him sent to the Hartford Hospital, where he was operated on by Dr. Sweet, who is one of the best surgeons in this part of the country. It was a case of diseased femur. I saw the doctor after the operation, and he said if the case had gone another month the man's leg would have had to be taken off.

"This is not a compensation case, and we have paid all expenses and are assisting the family financially, and will continue to do so until the man gets back to work, which will be another month at least. When he goes back he is to reimburse us in small amounts per week for money we have spent. Our idea is not philanthropy, but to get the man back to work as soon as possible.

"It is merely a gamble of one hundred dollars or so against this man's life. We feel that if he does get well and back to work he will be not only a good employee, but a good booster for this company.

"This is one of many such cases which we have handled in the last year. We do not advertise our welfare work very extensively, but when a man or family is in need and is worthy, we stand behind him. I believe that this kind of work is making the men more contented and happy."

"Typhus Train" Aids Russian Refugees

A specially equipped "typhus train" financed by funds supplied by the Interallied Sanitary Commission and managed by the Red Cross, has traveled from Vladivostok to the Ural Mountains, its staff of doctors and nurses ministering to persons afflicted with the malady and instructing the people in preventive measures. At the present time this train is operating among the soldiers of the Kolchak government on the Perm front. Many carloads of drugs and medical supplies have been provided for the men of the Russian army. A special Red Cross mission which recently made a survey of the situation in western Siberia found that many of the hospitals had been stripped of drugs, instruments and surgical dressings. The Red Cross is equipping these institutions. In all, about forty tons of drugs have been shipped from America since last September.

About 1,500 refugees remain in and around Vladivostok and these have been concentrated in barracks a few miles outside of the city.

CATHOLIC HOSPITAL ASSOCIATION OF U. S. AND CANADA

Fine Spirit of Loyalty and Progress Displayed at the Fourth Annual Convention

The Fourth Annual Convention of the Catholic Hospital Association of the United States and Canada was held June 25, 26 and 27, 1919, in the assembly hall of St. Francis Xavier Academy, Chicago.

After mass said by Most Reverend Sebastian G. Messmer, Archbishop of Milwaukee and honorary president of the association, the meeting was opened by the honorary president's address and the address of the president, Rev. Charles B. Moulinier, S.J.

Progress in Hospital Standardization

"It is only the standardized mind," Father Moulinier said, "that can possibly attempt to standardize other minds, and similarly it is only the standardized institutions that can attempt to standardize other institutions." The medical and nursing professions are not yet standardized. There are only a few men and institutions that are. There is just one association of medical men and just one official hospital association that are making earnest efforts to standardize themselves. Dr. John G. Bowman is the only man who has had the vision to attempt to standardize his own mind.

The plan of standardization offered by the American College of Surgeons is simple, workable and logical. It can be put into operation in any place and under all circumstances, but there must first be earnestness and there must be organization. It calls for records, brief, correct, scientific and conscientious; it demands adequate laboratory service which must not depend upon the special fees which a patient can pay. It demands organization in the medical staff of the hospital.

The superintendents and doctors must know the latest and best things that are being done in hospitals. This knowledge is to be obtained through training, through visiting other institutions, through attending hospital associations, through consultation, through weekly and monthly meetings of doctors and sisters, and through reading of medical and hospital journals. In this connection, Father Moulinier announced, the project of a Catholic hospital bulletin to contain the proceedings of the Catholic Hospital Association and other news and information of interest and importance to Catholic hospitals.

In connection with the organization of the hospital, Father Moulinier emphasized the necessity for prompt, kindly intelligent telephone service, for prompt and careful attention to letters and questionnaires and for the posting of bulletins in the hospitals giving information to the staff and employees.

After Father Moulinier's address, the association voted to increase the annual dues for personal membership from

$2 to $5 to provide the means for issuing the bulletin and doing the other work of extension planned by the association. The fees for institution membership are graduated from $5 for institutions under 50 beds to $30 for institutions above 250-beds capacity.

Principles and Facts of Standardization

Mr. John G. Bowman, director of the American College of Surgeons, said that in addition to staff organization, case records, and clinical laboratories, there are many phases of good hospital work that should come into a complete plan of standardization. Such matters as research work, the training of nurses, the training of interns, the out-patient department, etc., are of course important. But let us not try to do too many things at one time. If we can get together throughout all of the hospitals on a definite plan of organization, of keeping case records, and of adequate laboratory service, we shall do much to usher in a new era in the practice of medicine. Many of our other problems will in this process take care of themselves.

Hospital standardization is not a set of tricks or of rules which will bring about the changes we all desire. It is a set of principles which must find their springs of action first in your hearts. These principles you must believe are right if they are to succeed. And then, if you believe they are right, it is your duty to work, to fight, to die if need be, to put the principles into action in your hospital.

There is no group of hospitals on the continent or in the world that has more idealism and more of the determination to attain true standardization than those that compose the Catholic Hospital Association.

How We Standardized Our Hospital

Dr. F. A. Stratton, St. Joseph's Hospital, Milwaukee, said that prior to the introduction of standardization in St. Joseph's Hospital there was no system and no means of determining the character of the work done. The staff existed on paper and was without function. Once a year it met and discussed the war. It had no authority and offered no suggestions for the betterment of the institution. The records kept were altogether inadequate. A patient could be brought in and operated on without anyone being able to determine what the matter was, what had been done, and what the result was. Dr. Stratton said he never realized what this condition was until he had occasion to refer to his own records. The patient escaped with his life, and that was all that could be established by the record. The laboratory was neglected and autopsies were faulty. There was an impression that incompetent men practiced there; but no one wanted to take the initiative in eliminating them. The credit for the change is due to Mr. Bowman, Father Moulinier, and Dr. McGrath, "who," said Dr. Stratton, "put a little of the fear of God into our hearts. Most of us need to have a club held over our heads; believe me, this club was very helpfully used."

When it was decided to organize a staff the question arose, who should be members. It was decided to admit only specialists. Punctilious attendance at staff meetings was insisted upon; after three absences a man automatically ceases to be a member. Meetings are held once a month. There is a business committee of three who represent the staff in its dealings with the administration. The pledge of the American College of Surgeons is required of those who practice in the hospital. Records, of course, are insisted on. The hospital had no interns and it was necessary to induce the staff men to make records, and to make them like to do it. Now a history and tentative diagnosis must accompany the patient to the operating room, except in cases of emergency. Otherwise operation is refused. This has resulted in no loss of patients to the hospital. On the contrary, it has had to turn patients away on account of lack of beds.

Medical Practice in Hospitals

Dr. Louis D. Moorehead, Mercy Hospital, Chicago, opening the discussion on this subject gave plans of organization by which hospital staffs might be organized.

The Training School from the Doctor's Point of View

Dr. E. L. Tuohy, St. Mary's Hospital, Duluth, Minn., said that if he were to attempt to detail the good things in the sisters' hospital it would take up all of his time. Not every hospital, however, is thoroughly coordinated. Often a medical man is inclined to teach the nurse as if she were an embryo doctor. He would do better merely to emphasize the medical aspects of nursing. Again the nurses are taught on the hypothesis that in emergencies they may be called upon to do extraordinary things. This seldom happens. It is not worth while to attempt to drive into the poor nurses' heads everything that the doctor has learned through education and experience. The nurse should bring to the hospital a desire to enter a profession and not a trade, health and strength, and basic psychological development. The hospital on its side should offer material comprising different types of sicknesses, classification of patients according to disease and treatment, and suitable quarters and provision for recreation for the nurses. There should be a lay superintendent for lay nurses, and also a lay nurse on each floor

Delegates of the Catholic Hospital Association assembled on the beautiful lawn of St. Xavier Academy, Chicago, where

as assistant to the sister in charge. The sisters should not be overwhelmed with detail, for they have special gifts in making the patients feel at home, which they should have opportunity to exercise. Nurses should rotate on different duties and have an opportunity to learn something of the business management of the institution. Effort should be made to secure proper material for the training school through careful examination of applicants. Much money is wasted trying to train unsuitable candidates. Probationers unsuited for finishing the course should be directed into lines of activity for which they are better fitted.

The Formation of State Conferences

The Rev. M. F. Griffin of St. Columba's Church, Youngstown, Ohio, president of the Ohio State Hospital Association, presented a strong paper on the value, importance, and necessity of strengthening the Catholic Hospital Association in numbers and activity by the formation of State Conferences and Sisters' Hospitals, at the end of which he moved, and the convention passed a motion that state and provincial conferences be formed. Father Griffin was appointed director of this work.

A Phase of Medical Social Service

Miss Ann Doyle of Washington, D. C., representing the Surgeon-General, of the U. S. Army, spoke on the prevention of venereal disease in the United States. Of the first million men called out in the draft, she said 2.9 per cent had venereal disease. In the second million there was 4.5 per cent. The latter percentage did not represent a worse type but better examinations. As a result of the facts thus brought out, twenty-eight clinics were founded for free treatment of venereal disease in various localities, and thirty thousand civilians were treated. The Chamberlain-Kahn bill appropriates $1,200,000 and authorizes the founding of 260 clinics. A most important phase of this work is social service. Mere dosage with arsphenamin, etc., is absolutely ineffective unless followed up with social work. This is done by registered, graduate nurses with social training. While there is much good social service work done in hospitals there is little done with venereal diseases, especially preventive work.

Miss Doyle said that she had received her first inspiration and instruction on the need for such work from a sister of charity. Her first instruction in the origin of life came from another sister of charity. Who is better able than sisters and priests, Miss Doyle asked, to teach purity of life?

A Boys' Industrial Home

Father Flanigan of Omaha told something of the work of the boys' home with which he is connected, and its work in caring for boys who would otherwise be derelict. Part of the expenses of the home are made by the sale of soap powders and laundry products manufactured by the boys. Father Flanigan asked for the patronage of the Catholic institutions.

Report of Conferences

On June 26 conferences were held of Mothers Superior and superintendents of hospitals, supervisors and teachers of nurses' training schools, supervisors of records, laboratory technicians, operating room nurses, dietitians, anesthetists, and social service workers, respectively, and brief reports of the results were made to the convention. Among the points brought out were the following:

In regard to records, the right person to elicit the history from the patient is the doctor, but the intern should be with him at the time, for the sake of his education. Standard history blanks and records should be used, and the supervisor of records should refuse under all circumstances to accept an oral report.

One of the most important questions in regard to laboratory work is that of charges. It was decided that the best means is a flat charge proportionate to the price of the patient's room added to the bill. Laboratory work is in many cases necessary for a correct diagnosis, and, although it is difficult in some cases to get doctors to have it done, it is becoming more customary. If the laboratory is given a chance, it will always make itself felt. Port-mortems also should be encouraged.

The consensus was that the supervisor or teacher of a nurses' training school should preferably be a nun, and that nursing standards at the present time should be raised rather than lowered.

The extreme value of social service work was emphasized, and it was stated that medical service in the hospitals is never complete unless social service follows.

Answers to Questionnaires

An interesting and valuable feature of this session was the answers to questions handed in by the members of the association, although the committees appointed to formulate replies had a difficult task, owing to the large number of questions and the fact that some of them were so extensive as to call for a lengthy and exhaustive treatment, and hence could scarcely be answered in the few minutes allowed for replies. A white uniform dress with white shoes was approved for sisters in the operating room.

the fourth annual convention was held June 25, 26 and 27. Many orders from the United States and Canada were represented.

The reply to a question in regard to the success of female historians and record keepers was that female historians were very unsatisfactory, because male patients will not give them detailed histories. Female record keepers and checkers of records have been successful.

The reply to a question as to the osteopath, the attitude of the hospital toward him and his privileges in the hospital, was that the osteopath has no privileges.

Election of Officers

As recorded in the July issue of THE MODERN HOSPITAL, the Most Reverend Sebastian G. Messmer, Archbishop of Milwaukee, Reverend Charles B. Moulinier, Regent of the Marquette School of Medicine, Milwaukee, and Dr. Bernard Francis McGrath, of Milwaukee, were reelected honorary president, president, and secretary, respectively. Rev. M. P. Bourke, Ann Arbor, Mich., was elected vice-president. Vice-presidents are to be named from each order represented in the membership of the association.

The members of the Executive Board are as follows: Dr. Joseph Byrne, New York; Dr. L. D. Moorehead, Chicago; Mr. Michael Zimmer, Cook County Hospital, Chicago; Sister M. Veronica, Chicago, Ill.; Sister Mary Picher, Montreal General Hospital, Montreal; Sister Bernadine, St. Joseph's Hospital, St. Paul, Minn. There is in addition an advisory committee consisting of bishops and archbishops.

Outstanding Impressions

While it is impossible in the compass of this summary report to do thorough justice either to the many valuable papers presented or to the splendid spirit of the convention as a whole, a few impressions must be recorded, even though briefly and inadequately. One is that the Catholic Hospital Association very emphatically affirms its adherence to the doctrine which it holds as a Catholic association, while standing for progress as a hospital association. Another is the increase in vital interest shown by the participation in the proceedings of the sisters and staff members not on the program. It is quite evident that the membership of the Catholic Hospital Association is awake to the demands of the highest ideals and is thoroughly in earnest in its attempt to realize those ideals.

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NATIONAL SOCIETY FOR THE PROMOTION OF OCCUPATIONAL THERAPY

Third Annual Conference to Be Held in Chicago, September 8 to 11, with Headquarters at the Henry Favill School of Occupations

The third annual meeting of the National Society for the Promotion of Occupational Therapy will open its sessions at Bowen Hall, Hull House, Chicago, on Monday afternoon, September 8. This will be an open meeting and a second open session will be held Monday evening. All meetings will be held in Bowen Hall, Hull House.

Tuesday, September 9, a morning session will be held at Bowen Hall and the entire afternoon will be given over to a visit to Chicago State Hospital, where occupational and recreational work will be inspected. (This work is described in an article by Dr. Charles F. Read, superintendent of the hospital, on page 128, this issue.) An address on psychiatric reeducational work will be given on Tuesday evening by a prominent psychiatrist. A banquet at one of the leading hotels is scheduled for the evening.

Wednesday, September 10, the entire day will be spent in Milwaukee, upon invitation of Miss Elizabeth G. Upham advisor in occupational therapy and her co-workers at Milwaukee-Downer College.

Thursday, 11, the closing sessions will be held, morning and afternoon, and visits paid to the Presbyterian Hospital, Cook County Hospital, and if possible, to Fort Sheridan.

Many distinguished scientists as well as occupational therapists have accepted invitations to participate in the various sessions of the conference, among them: G. Canby Robinson, M.D., dean of the Washington University Medical School, St. Louis; Captain Bott, Hart House, University of Toronto; Dr. Norman Burnette, Department of Soldiers' Civil Reestablishment, Canada; Douglas C. McMurtrie, Director Red Cross Institute for Crippled and Disabled Men, New York City; Herbert Hall, Devereux Mansions, Marblehead, Mass.; Frankford Williams, M.D., National Committee for Mental Hygiene, New York City.

The officers of the society are: president, Dr. William Rush Dunton, professor of psychiatry, Johns Hopkins Medical School, Baltimore, and assistant superintendent Shepherd and Enoch Pratt Hospital, Towson, Md.; vice-president, Mrs. Eleanor Clarke Slagle, superintendent of occupational therapy, Illinois Department of Public Welfare, and director of the Henry B. Favill School of Occupations; secretary, Mr. Louis J. Haas, director of occupational therapy for men, Bloomingdale Hospital, White Plains, N. Y.; treasurer, Miss Marian Taber, State Charities Aid Association, New York City.

The headquarters of the society during the conference will be at the Henry Favill School of Occupations, 825 W. Polk street, Hull House block.

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AMERICAN DIETETIC ASSOCIATION

Program of the Forthcoming Meeting at Cincinnati—Practical Value and Scope of Papers

The following program of the meeting of the American Dietetic Association to be held at the Hotel Gibson, Cincinnati, September 8 to 12, is practically complete, with the exception of Tuesday forenoon, September 9. A few points of practical value regarding equipment, service, etc., will be discussed in addition to the subjects specifically mentioned, and there may be some changes in arrangement; but the members of the committee feel reasonably sure that the papers scheduled will be presented.

Practically, all phases of dietetics are represented—administration, teaching, social welfare, and dietotherapy.

There will also be round table discussions, affording an opportunity for the superintendent and the dietitian to present problems of a definite nature and help each other in their solution.

Further information may be obtained by addressing the president, Miss Lulu Graves, whose present address is 58 East Washington street, Chicago, or the secretary, Miss E. M. Geraghty, New Haven Hospital, New Haven, Conn.

Program

MONDAY, SEPTEMBER 8

AFTERNOON, 3 P. M.

Registration.

EVENING, 8 P. M.

Informal gathering, music, inspection of exhibits (with American Hospital Association).

TUESDAY, SEPTEMBER 9

MORNING, 10 A. M.

General Session.

AFTERNOON, 2 P. M.

Subject: Courses of Instruction for the Training of Dietitians, Katharine Fisher, Teachers College, New York City.
Discussion, Lenna Frances Cooper, Battle Creek Sanitarium.
Subject: Training of Pupil Dietitians, Violet Ryley, University of Toronto.
Discussion, E. M. Geraghty, New Haven Hospital.

Subject: State Board (Nursing) Requirements in Dietetics, Helen Wells, Drexel Institute.

EVENING, 8 P. M.

Reception and inspection of exhibits (with American Hospital Association).

WEDNESDAY, SEPTEMBER 10

MORNING, 9 A. M.

Section on Teaching, Katharine Fisher, chairman.

Subject: Standardization of Curriculums for Nurses' Training Schools, Miss Ruth Shelow, University of Cincinnati, formerly instructor Army School of Nursing.

Discussion—

Subject: Relation of the Dietitian to the Hospital Staff, Annie W. Goodrich, formerly dean, Army School of Nursing.

Section on Social Welfare Dietitians, Blanche Joseph, chairman.

Subject: Training of Social Service Dietitians, Emma Winslow, Charity Organization Society, New York City.

Subject: Social Service Dietetics, Mary Shapiro, director of Bureau of Home Economics and Dietetics, New York City.

AFTERNOON, 2 P. M.

Section on Administration, Emma Smedley, chairman.

Subject: Dietitian Service Abroad, Bertha N. Baldwin, with American Red Cross, France.

Subject: Problems in the Administration of Government Dormitories, Miss Olive Davis, assistant manager, Government Hotel, Washington, D. C.

Section on Dietotherapy, Minnie A. Phillips, chairman.

Subject: Dietotherapy, Dr. Baumann, University of Iowa.

Discussion.

EVENING, 8 P. M.

Subject: Some Feeding Problems "Over There," Mabel C. Little, with Y. W. C. A. and Y. M. C. A., France.

Subject: Hospital Cafeterias, Eleanor Wells, Teachers College, New York City.

Discussion, Sate Harris, Massachusetts General Hospital.

Subject: Cafeteria Management, Blanche Geary, National Y. W. C. A., New York City.

Discussion.

Subject: College Feeding Problems, Emma Baker, Teachers College, New York City.

Discussion, Elsie Leonard, University of Wisconsin.

THURSDAY, SEPTEMBER 11

MORNING, 9 A. M.

Chairman, Bertha M. Hyde, dietitian Cincinnati General Hospital. Round table of discussion led by Miss Lulu Graves.

Topic: Institutional Problems.

12:30—1:30 P. M.

Buffet luncheon at Cincinnati Medical College, with the American Hospital Association.

AFTERNOON, 2 P. M.—3 P. M.

Chairman, Lulu Graves, president American Dietetic Association, Cornell University, Ithaca, N. Y.

Address: The Relation of the Physician and Dietitian, Elizabeth Campbell.

Address: Dietetics from a Physician's Standpoint, Roger S. Morris, M.D.

3 P. M.

Open House at the Woman's Building, University of Cincinnati.

EVENING, 7:30 P. M.

Business Session, 8:00 p. m.

Subject: Work of the Red Cross Chapter Committees on Nursing Activities, Clara D. Noyes, acting director, Department of Nursing, American Red Cross, Washington, D. C.

Subject: The Dietitian in the Public Health Service, Wm. H. Walsh, Hospital Division, Public Health Service.

Subject: The Organization of the Dietary Department of a Military Hospital, Winifred Short.

Moving Picture Film, "Food Supervision for the Army," Lieut.-Col. J. R. Murlin, University of Rochester (former chief of the Division of Food and Nutrition).

FRIDAY, SEPTEMBER 12

MORNING, 10 A. M.

Subject: The Dietitian in the Hospital Dispensary, Bertha Wood, Food Clinic, Boston Dispensary.

Subject: What We Have Learned in Dietetics from the Army, Lieut.-Col. J. R. Murlin, M.C.

Subject: Hospital Food Waste, Ernest E. Irons, Lieut.-Col., M.C., formerly commandant, Base Hospital, Camp Custer.

AFTERNOON, 2 P. M.

Subject: Diet in Disease, Mary Swartz Rose, Teachers College, New York City.

Report of the meeting of the American Home Economics Association, Ruth Wheeler, Goucher College.

Report of the Committee on the Standardization of Curriculums for the Training of Dietitians.

Report of the Committee on Nomenclature.

Report of the Committee on the Standardization of the Work of Dietitians.

Miscellaneous Business.

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THE FIRST ANNUAL MEETING OF THE NEW JERSEY HOSPITAL ASSOCIATION

Home State of President Falls in Line With a New Hospital Association—Auspicious Initial Meeting in the Board of Trade Rooms, Newark

Some thirty of the progressive hospital superintendents of New Jersey were in attendance at the first annual meeting of the New Jersey Hospital Association held at Newark, June 26. The board of trade, recognizing the importance of such an organization for the welfare of the city and state, extended the courtesy of the use of their rooms for the meeting. The temporary chairman was Mr. Charles E. Talbot, superintendent of the Newark City Hospital.

Officers elected for the year 1919-1920 are: president, Dr. George B. Landers, Morristown Memorial Hospital; first vice-president, Rev. Thomas A. Hyde, Christ Hospital, Jersey City; second vice-president, David Schwab, Barnett Memorial Hospital, Paterson; third vice-president, Miss Louise Pugh, R.N., Middlesex General Hospital, New Brunswick; secretary-treasurer, John C. Vidt, Newark City Hospital. The executive committee consists of Miss Eugenia A. Ayers, Elizabeth General Hospital; John M. Smith, Muhlenberg Hospital, Plainfield; Joseph Karrakis, Beth Israel Hospital, Newark. The next meeting of the association will be held at Elizabeth on Thursday, October 9, 1919.

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CONFERENCE OF INSTITUTIONAL MANAGERS

Institution Section of the Home Economics Association Holds Interesting Meeting

A meeting of the institution section of the Home Economics Association was held in Madison, Wis., June 9-13.

Many phases of lunch-room management in various kinds of institutions were represented at this meeting, and some definite practical things accomplished.

The suggestive course of study will be discussed in the meetings as mentioned and a report given later.

At the opening meeting on Monday, President Birge drew attention to the change in training and ideals of women in the past few years. The former training was haphazard and imperfect; the present training, perfect and scientific.

Miss Abbie Marlatt, head of Home Economics Department, University of Wisconsin, considers institutional management a graduate study. Only fundamentals are suitable for undergraduates, such as science, economics, labor problems, psychology. All life is institutional except that of the child.

On Tuesday, Mr. Walter H. Gregory, Hotel La Salle, Chicago, gave an important paper on "What the Hotel World Wants." The hotel problem, he said, is to provide entertainment for the transient—a civic, political, and social center for him. The highest grade of service ideal takes 75 to 85 individuals to serve each individual hotel guest. To give this service cooperation in the full is paramount. The manager is responsible for the financial success, organization, and service. He must be an executive, quick judge of men, quick thinker, quick to act and coordinate, up-to-date and alive to changing conditions. An ideal is desire to serve to the end of satisfaction. There is no limit to the possibilities of women em ployment "if" they can measure up to the requirements. These are a matter of personality and responsibility rather than of training. The successful manager's personality must be cordial, but impersonal—"able to greet a fellow as a friend and let it go at that." Women fail in responsibility; they are often lacking in sense of loyalty to the "job" duty, etc., either through an exaggerated sense of fun, or ill health, or claims of family or friends.

This paper was very thoroughly discussed—the consensus did not agree with speaker, thereby, perhaps, proving this point of the almost impossibility of woman's temperament to take an impersonal view of a situation.

Mrs. Lois P. Hughes, of the Hotel McAlpin, discussed

"Opportunities for Women in the Hotel World." Hotel world, she said, is fast becoming a huge industrial organization of its own. There are openings for women in many lines, as: (1) Housekeeper in charge of labor, linens, soaps, cleaning, and interior decoration; (2) floor clerk in charge of mail messengers, keys, guests' comfort, and lost and found department; (3) bookkeeper and cashier, or comptroller of food sales accounts; (4) workers in every department of the kitchens; (5) sanitation expert; (6) hostesses in charge of woman's floor and as purchasing aid; (7) officers and helpers in charge of special dining rooms; (8) publicity department in connection with records, advertisements, party forms, etc.

The increase in the employment of women in hotel service has been from 25 to 35 per cent and women have proved to be 60 per cent efficient. Women need training in courage, cooperation, and courtesy. They are more careful, ingenious and economical than men. Women need to acquire the right attitude of mind; to forget about time to come and about her girlhood home, to educate her family *not* to demand her services, but to consider her business as important as that of the business of the men of the family. Women need training in the (1) development of the impersonal attitude, (2) development of responsibility, (3) administrative work, and (4) practical problems—through apprenticeship. Mrs. Hughes and Mr. Gregory agreed to this need, but hotel work is so busy there is little time for apprenticeship.

Miss Lenna Cooper, supervising dietitian, United States Army, Washington, D. C., was chairman of the Wednesday meeting, devoted to institutional administration courses. Miss Cooper has come to realize the need of standardizing training for dietitians. As army hospitals decrease, public health service will increase. The conference recommended a minimum two-year course, to be considered and discussed at the Home Economics meeting, Blue Ridge, N. C., and at the meeting of American Dietetic Association, Cincinnati, and then to be recommended to the governor. A committee consisting of Miss Lena Casper, Battle Creek, Mich., Miss Abbie Marlatt, Home Economics, Madison, Wis., Miss Chloe Clark, University of Washington, Seattle, Wash., Miss Fee, Pratt Institute, Miss Treen, school lunch system, Boston, Miss Leonard, director of commons, Madison, Wis., and Miss Sanford, Cornell University, was appointed to work out such a course.

Miss D. B. Treen, chairman of the Thursday session on school lunches, gave the history of the Boston system and described the system, which comprises a central kitchen, sending food to nineteen centers. Her conclusions are that the central kitchen will never serve high school pupils the desired variety, but that it has certain advantages, including check of food, materials all in one place, one set of experts in one place, and skilled labor for all at a lower cost. Under normal conditions, she says, the lunch will pay for itself. The movable equipment is paid for by organization. The room and fixed equipment are furnished by school system.

In Philadelphia, the system is under central supervision and authority—under the school board; the city buyer does not buy lunch supplies. There is a dietitian in charge of every school, who trains untrained women in actual charge of cooking in each school. Penny lunches in grade schools are not self-supporting.

In Chicago, the penny lunch board controls and pays the help; domestic science teachers supervise. The fifth to seventh grades help serve, taking twenty minutes out of school hours. The lunches are little more than self-supporting. Candy and cooking profit pays for equipment and for pupils unable to buy their own lunches. The need is to make the board of education realize the educational and nutritive value of good food.

Miss Steininger described the use of the cafeteria by a normal school domestic science class as a laboratory for experience, to try out equipment and forms of service, cooking foods in amounts of family size up to 12, and then in amounts to serve 50 to 100, to serve the clerical force, students, and faculty. A manager is appointed daily to take charge of food preparation and service. A stock girl has charge of equipment and supplies.

Miss Treat, of Minnesota, described the college cafeteria. She believes that the college cafeteria is an economy in labor and food—1.74 as much waste in dining-room system. The aim of the college cafeteria, in the standards set, reflects ideals and policies of the university and sets food standards. It must be a financial success; should be properly equipped. The service ideal is first; it is an all-university project, functioning through every department. It is educational in character. As for control, the concession plan is bad. The business office control should be financial only. It should link up to some educational department but not be controlled by it. The food standard should be high; the cafeteria should refuse to serve cheap products, for there is training and educational advantage in good food. Dietetic planning is necessary—with the aim of giving less variety in a day's meal, but plenty of variety from day to day. Careful supervision of service means that sum total of service gives proper calorific value. Portions are standardized. Counter service shortens time and is more efficient. The atmosphere should be peaceful and quiet, without confusion or hurry, with food properly arranged on counter. The room should be made attractive—if possible, give it the tea-room atmosphere. The policy should be, good wholesome food, as near cost as possible. The cafeteria should make no profit, and also tend to serve the above educational purpose.

Mrs. Fleet, chaperone Chadbourne Hall, University of Wisconsin, discussed the problem of acquiring and maintaining a home atmosphere in a dormitory housing from one hundred to five hundred girls, and at the same time maintaining discipline.

Miss Faith McAuley, of the University of Chicago, speaking on marketing for the institution, discussed the necessity for specific and practical knowledge of trade material along lines of content, method, business practice, and the economics of the subject, including cropology and commercial geography, distributive agencies, value and price factors. There is the finest opportunity in this field for the tie-up of education to a subject of practical value.

Dr. Hugh Payne Greeley, of Madison, gave a paper on the physician and the dietitian which is published in the Department of Dietetics this month, page 132.

Mrs. Madeline S. Mehlig, Red Cross Dietitian Service, representing the Chicago Dietetic Association, read a paper on the dietitian in the small hospital.

Miss Lenna Cooper spoke on "The Supervising Dietitian," from experience in the United States surgeon-general's office. She found that camp officials often did not know what to do with dietitians. She had usually to make her own place, a pioneer did excellent work planning menus, supervising service, and advising on special diet. There is general need for stimulation of work by closer personal contact and cooperation.

Papers were also read on equipment and insulation.

DEPARTMENT OF NURSING

Conducted by ANNIE W. GOODRICH, Dean Army School of Nursing and CAROLYN E. GRAY, R.N.

Please address items of news and inquiries regarding Department of Nursing to CAROLYN E. GRAY, R.N., Secretary of the New York Board of Nurse Examiners, 135 E. 45th St., New York City.

A SURVEY OF THE NURSING QUESTION

Postgraduate and Affiliated Courses—Ward Assistants—Care of the Health of Nurses—Prophylactic Measures

By M. T. MacEACHERN, M.D., C.M., Superintendent, Vancouver General Hospital, Vancouver, British Columbia

[Concluded from July issue, p. 70]

POSTGRADUATE AND AFFILIATED COURSES

This is the day of specialization and advanced training in all lines. It is therefore necessary to consider first, postgraduate courses, and second, the affiliation of smaller training schools.

In this hospital and a large number of others on our continent, postgraduate work is usually confined to the following lines: Surgery, obstetrics, pediatrics, dietetics, eye, ear, nose and throat. Speaking generally and in a critical way, I do believe there is something wrong and something lacking in our postgraduate courses. Annually the training school for nurses of the hospital here received several scholarships from various members of our medical profession of sufficient value to cover a six months' course in certain special work elsewhere, and I say frankly, and regret to say, that we have great difficulty in finding a place for such candidates where we feel they will receive a thorough training and wide experience carefully directed, which we desire they should have. There seems to be a loss of perspective in the arrangement of postgraduate work in our hospitals and a failure to recognize what these courses should be. Usually a large amount of work, which has already been thoroughly acquired in the first school, is demanded of these postgraduate nurses, and that time is lost so far as spending it in the more purely essential technical portion which she is seeking is concerned. It is argued, and possibly quite truly so, that any other course would interfere materially with the nurse-in-training. If so, there seem to be other arrangements which could be made, but such courses should not be offered unless sufficient in return can be given to justify calling them postgraduate courses. We all are aware that too often there is lack of strict supervision and of instruction. The course is too much as if one said, "Well, there it is, go to it, and get all you can." That method is all right in itself, for I do not approve of "spoon-feeding," as one of my college professors called it, but I do recommend systematic instruction with good supervision, so that a candidate can make the best use of her time. Of course there is a great deal to be said on the other side, as so often young women are selected for postgraduate work who are not suitable at all for any such special line. There are many cases that cannot be developed, a condition which must be discouraging and annoying to the superintendent of a training school who has to deal with such a pupil. Possibly, therefore, the cause of many cases failing in this respect is the fact that we do not select the proper nurse to take the course. Be that as it may, a well-arranged postgraduate course should embody the following features: First, well-arranged and thoroughly systematized instruction; second, intensive practical or technical experience and training along a particular line; third, expert supervision over such work; fourth, tried responsibility; and fifth, a final examination, oral, practical, and written.

This hospital will insist on such conditions being fulfilled in the future. The most recent advance along these lines is the addition of an instructor in the operating-room department, who will do the teaching and instruction; the instruction will be taken care of in like manner in the other departments where postgraduate work is being given. It seems to me that it is the duty of every well-equipped training school to give such courses for the advancement of nursing knowledge.

Coming now to the second question, that of affiliation, we find throughout our country that many of the smaller hospitals with smaller training schools are affiliating with the larger institutions; this condition now exists in the province of British Columbia, where there are some ninety to one hundred hospitals and a conservative estimate of forty to fifty training schools at least. The question, therefore, is, how can the larger training school help the smaller and help the nurse to acquire a broader training through a more widespread and diversified experience? They can offer affiliated courses, and, in connection with this hospital and others in the province, such arrangements have been made by several training schools, so that third-year nurses can come here and spend their final year, devoting their time mostly to operating room, maternity, pediatrics, and other specialties. The hospital desiring such privilege must measure up to certain requirements which must be complied with, and are as follows:

Rules and Regulations for Affiliating Pupils

"1. Nurses having had two years' training in their own schools are allowed to take their third year in the training school of The Vancouver General Hospital, provided, however, that their work had been satisfactory in the hospital in which they were training and that they are willing to comply with all the rules and regulations as laid down by The Vancouver General Hospital Training School for Nurses.

"2. All applicants must have the approval of the superintendent of nurses of their own training school.

"3. All applicants must have their third-year holidays before coming in.

"4. Nurses will wear the uniform of the school sending them.

"5. Nurses will graduate and receive their diplomas from hospital affiliating.

"6. Nurses must be prepared to demonstrate their ability in the making of various kinds of beds; bed baths, simple and temperature sponges; enemata; giving medicines; douches; charting; catheterization; local applications; general ward care; and preparation and general after-care of surgical patients.

"7. Provided nurses can comply with Regulation No. 6, the course for the third year will be devoted mainly to operating-rooms, maternity, pediatrics, and dietetics.

"8. In order that uniformity of teaching may be obtained, it is recommended that the following textbooks, which are in use in The Vancouver General Hospital, be used: Practical Nursing, Maxwell and Pope; Anatomy and Physiology for Nurses, Pope or Kimbers; Materia Medica, Paul, third edition.

"9. Nurses are advised to study the following: First-Year Nursing, Goodnow; Clinical Studies, Aikens; Essentials of Medicine, Emerson; Nursing in Acute Infectious Fevers, Paul."

In making application the following information is necessary and must be filled in by the nurse desiring admission to any of the courses:

APPLICATION FOR AFFILIATION COURSE

1. Name in full.
2. Home address.
3. Name of school in which you are training.
4. Are you single, married or a widow?
5. Date of your birth.
6. Are you in sound health?
7. Were you vaccinated against smallpox, and if so, with what results?
8. What preliminary education have you had prior to entrance into your training school for nurses?
9. Give name and present address of superintendent of nurses in charge of school where you are a student.
10. State number of beds in hospital where you are in training.
11. Have you received regular class instruction and lectures during your course of training in your hospital?
12. State length of time spent in the following departments of your training schools: Medical wards, male; medical wards, female; surgical wards, male; surgical wards, female; obstetrical wards; children's wards; care of infectious diseases; and operating-room work.
13. When can you enter?

The nurse graduates from her own training school though she has spent her final year here. Each pupil is on a two months' probation, and, if her service is not up to the standard, will be returned to her own institution. In this you will readily see that there is a distinct advantage to the nurse who secures a broader training than she could secure in her own institution in the final year, but there is a disadvantage to the hospital in losing her services during the third year when she would be most useful to them. If the smaller training schools, however, are to continue, such affiliation must be carried on, because we must not graduate nurses without a thoroughly broad training along nursing lines. There does exist in the province a lack of uniformity of training, and during this year an effort will be made through the British Columbia Hospital Association to establish a standard curriculum for all training schools in British Columbia, a movement which will help affiliation considerably.

THE WARD ASSISTANT

There is a greater or less shortage of applications of young women with the necessary educational advantages to take up the nursing profession and a large number of institutions throughout our country are short of nurses. Why this should be, is difficult to say, and it is impossible to point to any particular factor causing such a shortage. I do, however, feel that there is something lacking, and this fault may possibly be due to the modesty of the nursing profession. I refer to the failure of the nursing profession to impress on the world at large the changes and advancements in the profession, and the actual work that nurses are doing and that they are required to do at the present time; in short, there seems to be a lack of publicity. The world at large is not impressed with the fact that the nursing profession is the ideal one for womanhood, that it is a grand and noble work, that it stands for the highest and best ideals as well as for many additional things which could be mentioned and to which more publicity should be given but to which, undoubtedly through modesty I suppose, it is not. Indeed, I am afraid in these strenuous times with socialistic movements so rampant that both the nursing and medical professions may be brought closer to a more commercial plane unless we keep our ideals constantly before us. However, the fact is that we find fewer young women entering the profession, and it is therefore necessary that we must see what the cause is and apply the remedy.

Possibly the linking up with the higher educational development may be more of a stimulus for women to enter this profession. Possibly the great prominence now being given and interest taken in the nursing profession throughout our land will stimulate a larger number of young women to enter it. On the other hand, possibly the shortage is due to the fact that there is a greater demand than ever, as all training schools are growing and the field is enlarging. It is thought by some that the standard required for admission to many training schools is too high, but this is not the case, provided the young woman is offered a thorough training and equipment which will be a great asset to her through life. Then again, there is the question of remuneration or the financial return after graduating. Nurses' fees have gone up in the last year or two and I do not think they will ever come down again. Provided the nurse doing special work gets continuous work, the fees now seem fairly satisfactory, but if she does not get steady work she may have some discouragement in her profession. At all events the cause underlying such a shortage requires our serious consideration and I have only two thoughts to leave with you: First, the educational campaign, so to speak, to impress on the public the importance of this profession, and second, the improvement of all training courses and linking them up with the higher education so far as is practical, offering the nurse all we possibly can; that is, I consider that it is up to the nursing profession itself to make or unmake conditions which are present or which may arise.

In reference to a paragraph quoted in the introduction of this paper, mention was made of the ward assistant or helper. Ward assistants were originally introduced into the Vancouver General Hospital military department some two years ago, nurses being exceedingly scarce, owing to the war. They are still serving in this capacity and the system has been quite satisfactory. They are not the so-called "V. A. D's," as they are paid a living salary and provision is made for room, board, and laundry. During the war such young women were very easily secured, as they felt they were doing a service. During the epidemic they were used extensively throughout our emergency hospitals, but unfortunately we were not able to give them the necessary instruction to make them of the greatest use. These young women do the housekeeping duties of the ward, duties which I do not need to enumerate but which, as you know, take up a good deal of the time of the nurse. The graduate nurse attends to all medication, treatments, and dressings, as well as charting and supervising the meal service. This arrangement, I may say, has been exceedingly satisfactory and, in fact, saved the situation for us when nurses were absolutely unobtainable. These helpers or assistants are not generally used in the civilian wards of our hospital, though they were during the influenza epidemic. The reasons why they have not been used are: First, we do not just know how far it might interfere with the training of nurses; second, it is a financial question and involves a greater outlay of money than is customary; and third, the question arises, will it tend to make graduate nurses less resourceful when out in private practice, to have become used to such assistance in the hospital? I am not in a position to answer these questions. They can best be answered by the leaders in the profession. However, if we have the right kind of young women in the profession with the proper ideals before them, the third objection will not obtain. There are certain definite advantages in the system both to the nurse and to the patient. The present system means that a large proportion of a nurse's duty, and, consequently, of her time, is taken up with household matters which she continues to do day after day, over and over again, approximately three hundred and sixty-five days a year for three years. Is it not true

that every nurse in her training usually makes three to four thousand beds at least? Do you not think she would be efficient at this particular duty when she had made, say, three or five hundred? Why not take the remainder of her time for the true nursing science, for the training of observation, and for application of nursing principles? We depend greatly on efficient nursing observations and refer at all times to the nurses' notes which are the outcome, of course, of well-trained observation. The duty of taking notes is admitted as being exceedingly important, and more time allowed for such observation and for its expression is necessary today. Furthermore, under this system, more time would be allowed for the actual instruction and teaching, which would be a distinct advantage in the training. There is, therefore, a great deal to be said in favor of this system so far as the training of the nurse is concerned, when it is put on a proper basis.

In regard to the advantage from the hospital administration standpoint, we all know that the innumerable abnormal dispositions we have to deal with demand a diversified attention indescribable; scores of whims and desires, the so-called "little things," may arise which I cannot enumerate, and often the attention to some little desire or request or whim may do the patients more good than medicine and keep them happy and contented and easy to wait on; in short, they take their treatment better when these things are regarded. In such cases it is almost impossible for a nurse to attend to these, as she is busy with the more essential matters pertaining to her actual nursing service, and yet I believe that these little things which seem to us so unimportant and nonessential to the patient's recovery, are very important after all, and, if regarded, might materially help to keep up a fine *esprit de corps* among the patients. We all know that a cranky patient impedes efficient service, makes nursing a burden, in short, keeps everybody unhappy around the ward, and, looking at it from a hospital administrator's standpoint, I am beginning to feel that it is our duty and distinctly to our advantage to maintain a good *esprit de corps* among our patients and remember that we are at all times dealing with people at a time when their dispositions are more or less abnormal.

I think I am safe in concluding that some day this system of ward assistants will be generally adopted throughout the civilian wards of our hospitals and put on a sound basis with classes for instruction arranged, and thus become a recognized feature of our institutions.

During the past two years we have had the experience in this hospital of training nursemaids at the infants' hospital, an experiment which seems almost on a parallel basis. These girls are taken in for six months' experience and training, receiving instruction; they pass an examination and are eventually turned out as nursemaids, many of them finding their way to good families where they secure positions looking after well babies. I may say from our experience that this arrangement is working out satisfactorily and does not in any way interfere with the nurses training in this institution. In England there is a school which trains a high-class nurse, who takes standing equal to that of the trained nurse. She is a real child nurse. She takes charge of the training of the child and his care in sickness or health until he is of school age.

PHYSICAL HEALTH OF NURSES

If the hospital is going to live up to its health ideals and its health demands, it should necessarily adopt measures to put the health of its staff foremost. The remarks which I intend to make might apply to the entire personnel, but in this paper I am referring only to nurses.

Many young women desirous of entering the profession of nursing are physically unfit for such a calling and cannot stand the arduous duties which are before them, whereas in other cases persons who are considered physically unfit or below par may develop into healthy, robust young women. During the past eight years I had the opportunity of studying the health problem of nurses very fully, and this paper will embody, as far as possible, my conclusions on the matter.

It is the responsibility of every hospital management, especially on the medical side, to see that adequate interest and care is taken in the health of the nursing staff, and this phase of hospital management must be considered more seriously by our hospitals than it has been in the past, for the army has taught us many things and, in fact, has revolutionized the medical service. Routine examinations have unearthed conditions which would have been a serious consideration to the applicant if he had been passed over and sent into service. Likewise our nurses must have a well-organized medical service whose duty it is to discover any disease or physical unfitness, as well as to treat such conditions as arise during the training. Today there is no excuse for any young woman who is physically unfit to enter the profession and later on to break down in health. My experience is based on a large number of physical examinations and observations of nurses who passed under my care during my years of hospital work. I find that prospective applicants can always produce a certificate of health, usually from their dear old family doctor, and they tell me invariably that he did not examine them but issued the certificate because the family was always healthy. These girls at one time entered our training school and were not examined till the end of their probationary time—about two months after they entered; then it was always found that from 8 to 10 per cent were unable to continue their duties and must be rejected. This often causes very serious disappointment to the young woman, to the family, and to the superintendent of nurses, for not infrequently do we find in such a case that there are fine prospects of a particular person making an excellent nurse. However, this 8 or 10 per cent had to be dropped. It was next decided that we should adopt a certain prescribed medical form for physical examination, of a stereotyped nature, and that the prospective applicant should have a doctor fill it out when applying. This form would necessitate a complete examination and includes the age, previous occupation, personal history, and family history of the applicant; the physical examination itself covers the applicant's development, nutrition, temperament, etc.; eye, ear, nose, and throat condition; respiratory system; circulatory system; digestive system; nervous system; glandular system; integumentary system; locomotor system; and genito-urinary system. The report of this examination is followed by any remarks or recommendations of the family physician.

From this it can be seen that a complete examination is necessary, and if a doctor has to fill this in, he will usually take more care to examine the person. This form was adopted and it was further arranged that a second physical examination should be made by the hospital staff on the first day, or day of admission, and, in this way, any physically unfit candidate who passed her own doctor was further checked over by the hospital staff according to our standard; her unfitness was therefore discovered early and before she had developed a love for her future work. Occasionally at these examinations now one or two may be found who are not recommended, whereas one or two may be recommended for two months' probationary

physical trial. With this system very seldom do we find anybody at the first examination to be rejected, and there is not more possibly than 1 or 2 per cent at any time. The third physical examination takes place after two months' duty, records of all being kept. As a result the number of cases who are rejected on physical examination and the number who break down in their training is practically nil, at least not worth regarding. Today we insist on a high standard of health, and systematized and rigid examinations.

In the physical examination of nurses on admission, the following conditions have been found: Heart murmurs and irregularities, varicose veins, fallen arches, diseased tonsils, pyorrhea alveolaris, spinal curvature, goiter, tuberculosis, diphtheria carriers, malnutrition. It is rather remarkable and interesting that in several instances we have found diphtheria carriers from our routine cultures of nose and throat. Many cases have to be referred for special examination to the different specialists and the different laboratories and reports received from the respective experts. No trouble or expense is spared, and the examination is made as rigid and efficient as possible; in fact today our physical examination is very difficult and one of the hardest to get by if there is any evidence of physical unfitness. In many cases extensive consultations and deliberations may be necessary before acceptance or rejection.

There are certain physical conditions, however, that are not detrimental to a nurse's training and may be improved with her work. Very often indeed do we see nurses improve and put on flesh, owing to the regular life, regular sleep, regular diet and constant hygienic conditions; the latter the hospital must provide. When there is a history of rheumatism or tuberculosis or such diseases as are regarded as more or less protracted, recurring, or incurable, the candidates are rejected and are not given a chance of continuing. We have found in many cases that the nurse usually gains flesh, especially during the probationary period, and we have seen girls who were considered delicate leave the school physically robust. Therefore, I trust that you will realize the importance of careful physical examination of all nurses before they enter on their training, as well as other examinations throughout their course.

In regard to the health of the nurse while in training, this is another feature. The minimum illness should be maintained and this can only be done by an organized medical service and a daily sick parade by a competent hospital official. Many can secure treatment to carry on while on duty and by such a parade early reporting of disease is made more customary. Others must be confined to bed and all must receive the best medical advice and consultation at the disposal of the hospital for diagnosis and treatment.

The incidence of disease here amongst our nurses is very low. During the influenza epidemic, of course, we had a large number, but came through with one of the best records possible. This was due to the expert medical care, the very early treatment, and the careful guidance of convalescence given to the nurse. The marvelous health record of our nursing staff throughout the terrible epidemic can not be surpassed anywhere, and to my late assistant, Dr. Mahony, should be ascribed that credit, as is well known to all.

One disease particularly more prevalent than any other among nurses is the so-called "sore throat." Careful examination on admission, with removal of tonsils if necessary, and the constant use of gargles throughout training will prevent many such throats. Fallen arches were at one time prevalent but, with more attention to footwear, this trouble has decreased rapidly. The incidence of infections of fingers is still high and most cases prove distinctly that the safety pin is the greatest offender. More nurses from our infants' hospital develop such conditions than from any other portion of the institution, and the prevalence of safety pins there explains this. Another condition with which we have considerable trouble is eczema or dermatitis, which develop from the irritating solutions in cases in which there is a tender and susceptible skin. These are indeed hard to deal with, but with treatment and care along prophylactic lines, the hands will eventually become hardened and withstand the irritating solutions. The incidence of infectious diseases should at all times be low. In conclusion, there is a great deal which could be said along these lines and many other conditions that I could enumerate. Undoubtedly the use of such serums as typhoid, anti-diphtheria, and others have had a wonderful effect and are much approved by all.

To summarize, the health of the nursing staff requires, first, rigid examination on admission and followed up as necessary; second, the daily sick parade at a stated hour; third, organized medical service for sick nurses; and fourth, prophylactic measures for diseases, especially for the more prevalent.

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NATIONAL LEAGUE OF NURSING EDUCATION MEETS

Training of Attendants—Eight-Hour Day for Pupil Nurses —Rank for Army Nurses—Among Important Questions Discussed

The 1919 meeting of the National League of Nursing Education was held in Chicago June 24-28 with headquarters at the Congress Hotel. The address of welcome was delivered by Mrs. Ira Couch Wood and the response by Miss S. Lillian Clayton, the president of the league.

Revision of Constitution and By-Laws

The committee on revision of the constitution and by-laws felt that owing to the great changes incident to the war, the increased prominence of the nursing profession, and the multiform duties which it is taking on in public health work, etc., a number of revisions were necessary, to include an annual instead of a biennial meeting, annual election of officers, appointment of a paid interstate secretary, establishment of headquarters, and an increase in the annual dues of from $3 to $5. Provision for a more definite organization of work of state and local leagues was recommended in order to avoid multiplication of effort.

Report of Committee on Education

The report of the work of the Education Committee was probably the most interesting of any report presented, in that its plans and work already accomplished will be of incalculable assistance to nurse educators in the solving of their many problems.

The committee has been strengthened by the addition of one other member, representing the group of public health nurses (since the committee has under consideration a number of matters which are closely related to public health nursing).

Measures to carry on a campaign in support of shorter hours for pupil nurses through the publication of pamphlets giving the arguments for shorter hours and pamphlets for superintendents of nurses and other officers of hospitals, outlining methods of organizing training schools on an eight-hour basis, were voted upon. These pam-

phlets, "The Case for Shorter Hours in Hospital Schools of Nursing," and, "Suggestions for Establishing the Eight-Hour Day in Nursing Schools," have been issued under the auspices of the National League for Nursing Education, the American Nurses' Association, and the National Association for Public Health Nursing and are ready for distribution. Copies may be obtained by sending 30 cents to Miss Isabel M. Stewart, secretary of the Education Committee, Teachers College, Columbia University, New York City.

The readjustment of student work in hospitals with the idea of eliminating such of the routine duties as are known to be relatively uneducational. The principal plan discussed was the use of paid helpers.

Measures to effect the grading or classifying of training schools.

Owing to the immediate needs of workers in the public health field the National Organization of Public Health Nursing was asked to organize a campaign among senior nurses and recent graduates for the recruiting of nurses for public health work. Superintendents of schools of nursing were also asked to cooperate to consider allowing some reduction of time in other departments of the hospital and in encouraging third year students to fit themselves for public health nursing.

Training of Attendants

The committee on training of attendants drew up a tentative course and presented it to the executive committee, but it is still subject to alterations. The public health nurses are strongly against institutional training for attendants and believe that such training could be best given in housekeeping centers, and that the course should be short—less than a year. The course, as outlined by the committee, will be based on the Red Cross textbook; it will require for entrance the age of at least eighteen years; the ability to read and write English and to keep simple bedside reports; and good physical condition and moral character; it will last for one year, nine months in an institution and three in a public health center; the subjects included will be elementary nursing, twenty hours; cooking and dietetics, twenty hours; care of children, five hours; care of the chronic sick, five hours; care of accident patients, five hours. This course will not be eligible for the Smith-Hughes appropriation, as it does not include the requisite number of hours.

In regard to the types of hospitals in which these courses will be given, it is emphasized that hospital training schools are *not* suitable. Those suggested are sanatoriums for tuberculosis patients, homes for the aged, for the insane, for nervous diseases, children's convalescent homes, etc.

Two subjects were suggested for addition to the curriculum—ethics, three hours, and anatomy and physiology, three hours.

California has already passed a bill providing for nursing attendants, and schools for their training are being established. The course differs somewhat from that recommended by the committee, and includes instruction in obstetrics. The power of administration of the schools rests with the board of health; the bill provides for their affiliation with each other and with other institutions; the courses are to be taught by a registered nurse.

The committee decided that the trained attendant would fill a real place in the care of children, of the chronic sick, etc., but that her status must be rigidly defined by law or else inferior nursing will result.

Vassar Preparatory Training Course

This course was successful in meeting the war-time emergency. Many of the students are continuing their training. It is decided that such cooperation is practicable, but that, if it is to continue, certain changes are necessary. Closer affiliation of the college with the hospitals is advised, and it is realized that the financial question must be dealt with, for the college summer course was more costly than peace-time needs would justify.

How the Army Nursing Service Met the Demands of War

Miss Dora Thompson, superintendent of the army nurse corps, said that on the day we declared war, we had in our regular army corps 230 nurses and 170 in our reserve. On the day that the armistice was signed we had 3,532 regular nurses and 17,956 reserves. The Spanish-American war had demonstrated the value of graduate nurses, and an act of Congress established an army nurse corps. We had at this time 100 army nurses serving in post hospitals in this country and in the Philippines. By 1916 their number had increased to only 150, but it took a sudden jump at the time of the mobilization on the Mexican border.

The reserve force consists of enrolled Red Cross nurses, and it was due to Miss Delano that this force was established. The war requirements waived registration, though this requisite has since been reestablished; nurses were received between the ages of twenty-one and forty-five; nurses of the allied countries were received.

Many Catholic nursing orders were represented, and Catholic sisters served overseas in Base Hospital 102. A great many colored nurses were enrolled and served in the cantonment hospitals for negroes.

In spite of the great numbers of enrolled nurses and the fact that at the signing of the armistice many applicants were on file, it soon became apparent that if the fighting continued the supply of nurses would be exhausted. On this account the Army School of Nursing was established by the War Department, described later by Miss Annie Goodrich. This school included a course for nurses' aids for whom the Surgeon-General had asked.

The demand for nurses was very great, coming, as it did, from many cantonment hospitals of 1,000 beds, from general post hospitals, from aviation stations, debarkation and embarkation hospitals, hospital trains, etc., and a large number were required by the physical welfare division at Washington, which looked after the health of the innumerable girls in that city doing war work.

Nurses are still retained in the service for work in the base hospitals in this country, in demobilization stations, in Porto Rico, and in Russia.

One of the important advances for nurses in the war was the recommendation of the Surgeon General, approved by the Secretary of War, that the ward management of military hospitals be given to a nurse. This placed her in authority before a non-commissioned officer. Formerly the ward was in charge of the ward master, an enlisted man.

Work of the Navy Nurse Corps

The work of the navy nurse corps, according to Mrs. Lenah Higbee, its superintendent, is chiefly distinguished for its variety. The navy nurse was not only a nurse, special and surgical, but she was a teacher, dietitian, cook, x-ray operator, clinician, and confidant.

Serving, like the army nurse, in cantonments in the early days of our mobilization, she had the most primitive conditions to deal with. In many of the hospitals even water had to be carried in from outside. This state of affairs, of course, was later much improved.

One of the most interesting indirect results of the war was the establishment in Haiti by the Navy Department

of a training school for native nurses (described, in THE MODERN HOSPITAL for April on page 273).

Five navy base hospitals overseas were organized by the Red Cross and turned over to the navy. The navy nurse served not only in France and America, but in hospitals in Ireland and Scotland and on ships in the transport service. In her work, also, the development of the executive nurse was a prominent feature.

Red Cross Nursing Service at Home and Abroad

Miss Clara D. Noyes outlined the work of the Red Cross nursing service. It was begun in 1906 under the auspices of nursing organizations. A committee appointed by the American Federation of Nurses outlined an organization for the American Red Cross. The Red Cross was made part of the army and navy corps by the Secretary of War, and, by a proclamation of the President, made the only outside organization to hold this position.

The Bureau of Nursing Service, organized for the making and distribution of dressings and the assignment of nurses in 1915, became in 1917 the Bureau of Field Nursing Service. Through it 10,877 nurses were supplied by the Red Cross to the army, to base hospitals, to hospital units, to training-school units, and to the public health service.

Fifty thousand nurses were asked for from the training schools and, for the assignment of the great number who replied, the United States was divided into thirteen divisions through which the local and state committees functioned. This decentralization was found to be most efficient.

The enrollment drive, begun June 3, 1918, was most effective, enrollments reaching the number of 100 a day. The withdrawal of nurses from the communities proved so serious, however, that in August at the request of the War Department, the Red Cross understook a minute investigation of the nursing resources of the country, to include all types of people caring for the sick. The influenza epidemic interfered seriously with this important work, which was incomplete when the armistice was signed.

The work of the Red Cross has been much more than caring for the wounded, important as that has been. It is playing an important part in the movement for public health service, both here and in France; in Russia it has established a training school for Russian girls; and its most conspicuous piece of relief work at home was in the influenza epidemic.

The Red Cross today has three thousand chapters, a membership of twenty million adults, and thirty-five thousand enrolled graduate nurses. Its big future, now that peace has returned, lies in the development of public health work.

Contribution of the Army School of Nursing

Miss Annie W. Goodrich, the dean of the school, said that it received in five months 10,689 applications; of these 5,267 were accepted; 199 students were placed on duty and 567 were held ready for assignment. The chief reason for the army school's existence is its service in developing executive nurses, familiar with army routine and army ways, and it is important, too, in maintaining morale which is likely to slump in times of rest.

The preliminary course, formerly given at post hospitals, is now concentrated chiefly at Walter Reed Hospital. Its great work has been in the upbuilding of nursing standards, even in the face of a great emergency, and the timely issuance of a standard curriculum.

The chief disadvantage in the army training school training is the poor clinical experience furnished by an army post which consists largely of healthy men at the most healthy period of their lives. On the other hand, however, there is a fair proportion of illness, especially where the hospital service is extended to the wives and children of the officers. The great advantages are the superior teaching facilities which are afforded, and the large graduate body of nurses of high standards which the school produces.

Under more stable conditions the school will provide a better faculty and arrange for affiliating courses in civil hospitals. It is believed that the army school can be made a model school of nursing.

How the Civil Hospitals and Nursing Schools Met the Test of War

The shortage of doctors and nurses, servants, and supplies, made a very serious situation for civil hospitals. It was met, according to Miss Elsie Lawler, superintendent of nurses, Johns Hopkins Hospital Training School, by the pupil nurse. Many women entered nursing on account of the war; the publicity campaign of the committee on nursing of the Council of National Defense was extremely successful. Schools and nurses' homes were enlarged, and the great numbers of pupil nurses entered heartily into the necessary program of conservation of food, material, and laundry. The advantages of this period of nursing education were the spirit of cooperation which was shown by everyone and the intimate relation which developed between the graduate and the pupil nurse. The disadvantage was, of course, the inevitable lowering of standards in war time. There is no need, of course, to tell of how well the pupil nurses met the big test of the influenza epidemic.

War and Post-War Activities Relating to Nursing

Miss Sara Parson, chief nurse of Base Hospital No. 6, A. E. F., which cared for 25,000 men up to the time of the armistice, praises the work of the nurses, to whom the medical officers left so much responsibility that their position was much like that of an intern. She has the following criticisms to make of the service: Under the military organization the work is hindered by divided authority, and special difficulties are presented by the nurses' lack of control over the orderlies; the limitations of equipment were serious, the nurses sometimes finding it impossible even to obtain heat by which to boil instruments; the indirect communication with the director of nurses prevented the smoothest working of exchanges, etc.; there was no way adequately to supervise the irresponsible nurse.

To remedy the defects of the system, Miss Parsons suggests (1) a distinctive uniform for officers, (2) absolute rank with pay; (3) authority for the director of nurses to decide exchanges, etc.; (4) lay women for many jobs, such as preparing diets, taking charge of supplies, etc.; (5) provision for emergency necessities.

Miss Grace Allison, chief nurse of Base Hospital No. 4, considered herself fortunate to be associated with the British. Under their organization, which differs in many respects from ours, the orderlies elect their service in the medical corps and receive seventy-five hours of instruction, after which the matron (similar to our chief nurse) passes on their fitness. The nurses, under the English system receive service and quarters similar to those given to officers.

Miss Amy Trench, chief nurse of Base Hospital No. 3, told of the special problems confronting the army nurse in the demands of the vast paper work of the army, in the necessity for keeping up the morale of the patients, and in the frequent absence of medical officers. She be-

lieves that one of the results of this work is that more will be expected of the head nurses than formerly. There will be more executive positions to fill and more executives to fill them.

Inspection of Cantonment Hospitals

Miss Anna Jammé, government inspector of cantonment hospitals, found that in some cases in the early days of the war the equipment in these hospitals was very meager; that food for the patients was poorly served; that the social hygiene wards were dirty and uncared for, "similar to a low-grade penal institution"; that the care given patients in the pyschopathic wards consisted simply of segregation; that in one tuberculosis ward there was no nurse in charge and that the patients were disciplined by being put upon a bread-and-water diet for three days.

When nurses were put in charge instead of the old ward master a transformation took place, although the nurses still had to struggle with the difficulties of inexperience resulting from their constant change in position.

Results of Organized Publicity in Interesting the Public in Nursing

The paper on this subject by Miss Carolyn E. Gray, secretary of the New York State Board of Nurse Examiners, will be published in this department later.

The Present Condition of Supply and Demand

Mrs. Bessie A. Haasis, educational secretary of the National Organization of Public Health Nursing, said that if it were simply a question of quantity the situation might be summed up by saying that the demand is overwhelming and the supply inadequate but improving. Since it is a question of quality as well as quantity, she went on to draw attention to a few interesting facts. During the past year there has been an unprecedented increase in the demand for public health nurses, both specialists and the kind who can carry on generalized work. There has been in particular a demand for school nurses qualified to do tuberculosis work, nurses for child-welfare work and mental hygiene nurses. An impression that there has been a great increase in demand for industrial nurses is not borne out by the experience of the National Organization for Public Health Nursing. This is partly because of a misunderstanding in regard to what constitutes an industrial nurse. Both nurses and employers are apt to think of an industrial nurse as one who does first aid work. The Red Cross peace-time program of developing community nursing has stimulated a demand for a nurse who can go to a community and build up from the very bottom an organization of one to twenty-five nurses. The labor organizations, which formerly have been somewhat hostile to social insurance, have some of them come to favor it, and this renders probable the passage of social insurance legislation, which will create a demand for a vast number of nurses.

At present there are nine eight-month, postgraduate courses in public health nursing, four four-month postgraduate courses, and seven summer courses of not less than six weeks in length, in addition to a number of courses which have not yet been recognized by the national organization. Twelve of these courses are taking undergraduates, and postgraduate courses are projected in four cities. In addition over one hundred hospitals are giving their senior students from one to six months in public health nursing during their senior year.

It is an injustice to send a student to a visiting nurse association, to a city board of health, or any public health nursing agency which depends on students primarily for the work accomplished—any organization which can not guarantee three hours, or preferably six, class work a week, and can not keep a check on the work done.

The Nurse as a Factor in the Prevention and Control of Venereal Diseases

In refutation of the idea that is being promulgated in some quarters that "nurses have been too highly trained" Assistant Surgeon-General C. C. Pierce said that careful observation clearly indicates "that to reduce the standard would be unwise; the public-health nurse needs *more* education rather than less," . . . she must understand not only nursing but psychology, economics, and sociology. Another false impression to be combatted is that "training a nurse in hospital unfits her for public-health work . . . that nursing in a hospital is concentrated on cure rather than prevention." On the contrary, the hospital experience is essentially necessary if the visiting nurse would understand and be fully qualified to meet the phases her work constantly presents.

He said that "fifty thousand public health nurses would be needed to fill the requirements of all the legislation now pending before Congress and the various state legislatures. This includes nurses who are going to do rural health work, sanitation, tuberculosis, and public school inspection. In venereal disease work the clinic cannot werk without one or two nurses not only for work in the clinic but for following up those cases by visiting them in their homes." It is frequently asked if it will not be unusual to follow those cases into their homes, but time and again when a man knows his situation he wants the nurse to come into his home and see if his wife and children have not been already infected. The nurse should have a very broad viewpoint on the sociological and economical aspect and bearings of the case. The necessity of making various social agencies realize their duty in regard to venereal disease is great. In the past, most hospitals would not take patients suffering from those diseases. There must be a determined effort toward the hospitalization of persons infected with these diseases, not only to cure but to prevent the spread through homes and factories and workshops.

Miss Isabel M. Stewart, of the department of nursing and health, Columbia University, spoke of the work the public schools might do. She deprecated the idea of inexperienced high-school girls being given the technical studies in nursing but thought the time is coming when they will receive instruction in preparatory studies, fitting them for a nursing course. Bacteriology, hygiene, chemistry, and nutrition are branches suitable to be taken up by a high-school girl.

Miss Annie W. Goodrich did not see the necessity for giving young girls entrance into professional training. How anyone can fail to understand the maturity of judgment necessary for a trained nurse was, to her, inexplicable. "I protest against the care of a child's nurse being given to a sick child." Children's nurses have no business with a hospital training-course, leading them to fancy they can fit themselves to care for ailing children. Babies, even more than grown people, need the highest class of nurses—"babies can't complain." A young woman just out of high school is not matured enough to assume the respensibilities of the training for a public-health nurse. Even a college girl does not begin to appreciate the needs of the situation.

Miss Clara D. Noyes, of the Red Cross Nursing Service, Washington, D. C., spoke of the $15,000 fund, recently appropriated by the Red Cross for the preparation of instructors. Many of the schools have been compelled to adjust their courses to meet the need of instruction in

public-health work, and there is a demand for instructors. The Red Cross has appropriated money to be used in scholarships and loan funds, and it is surely as fitting to use $15,000 to prepare instructors as to appropriate money for public-health nurses.

How We Can Secure Better Cooperation and Assistance of Head Nurse and Supervisors

Miss Parmella Doty believes that in the development of classes for nurses under trained instruction, we run a serious danger of loss in pushing aside the teaching head nurse. The development of nursing education has passed through the following stages: (1) in which the instruction was given almost exclusively by the teaching head nurse; (2) in which the pupil nurse is still on duty in the wards, receiving instruction from the head nurse but also attending classes; (3) in which the administrative duties of head nurse have greatly increased, leaving her no time for teaching, and in which much more systematic class instruction is given. In this period lies the danger of divorcing theory and practice.

The solution lies in cooperation between head nurse and instructor. To make this effective, of course, some system of standardization is essential. It is important that the head nurse and the instructor realize their common aim; it has sometimes been a serious criticism brought against the head nurse that her interest is too apt to be confined to smooth machinery. She can assist greatly in helping the pupil nurse to apply her theoretical training by insisting upon bedside charts and verbal reports, and by asking questions. It must never be forgotten that the head nurse is a teacher as well as an executive.

Recent Experiments in Nursing Education

Miss Claribel Wheeler, superintendent of nurses, Mount Sinai Hospital, Cleveland, said that the pre-nursing courses, at the colleges included both resident and non-resident groups. The colleges which gave them were Vassar, Teachers College of Columbia University, the Universities of Colorado, Iowa, and Cincinnati, and the Western Reserve. At Cincinnati the course was given only to the regular students and to the probationers of Cincinnati hospitals. Teacher's College gave a three-months' course preparing pupils for entrance to the Army School of Nursing and base hospitals. This course will not be repeated. At the University of Iowa a summer course in two six-week sections was given to twenty-eight students, some of whom were students at the university and some regular applicants to nurses' hospitals. Experience here showed that the work was both too strenuous and too theoretical. At Western Reserve the students were recruited directly through the university and nursing schools. The course was given in two five-week sections. The students met college entrance requirements, attended lectures at the medical school, and later entered schools of nursing in the city. The disadvantages of this course were the concentration of so much theory in so short a time, the difficulty of study in the heat of summer, the distance which students had to travel to reach the classes, and the difference in the regulations of the training schools. The advantages were that the schools received a larger number of students and the students received expert college instruction and a solid background.

A questionnaire was sent out to the twelve schools receiving students from the preliminary Vassar course. To this course, 459 students were admitted, of these 274 were admitted to training schools, and about 200 are still in training. Some of the training schools found some difficulty in putting these students through, other did not. The big difficulty seems to be the lack of early practical training and the fact that the two remaining years are too short to make it up.

Among the points which the experiment seemed to demonstrate are that nursing technique is best taught in the hospital ward, from which, however, routine labor should be eliminated; that in receiving these college students, the training schools benefit by the high class of women; that colleges are better equipped than training schools to give the scientific background, but that this must be correlated with actual practice, and, finally, that a ten-weeks' course is too short, except for college students, and that summer is a poor time to give it in.

Cooperative Teaching

Miss Elizabeth Reid, Rochester General Hospital, Rochester, N. Y., said that cooperative teaching has become a settled fact at Rochester, owing to the shortage of nurses and instructors. It is economical because teachers need spend none of their time filling in; the classes come at definite days and hours, and, as the same thing is taught by the same instructor in each school, no time is lost in preparation for different classes.

A feature of this course is the two-hour conferences for instructors in the different schools. Different suggestions are actually tried out, which sometimes have resulted in complete revisions of demonstrations. There is, also, an added incentive for good work when one does not work alone.

Making the Students' Practical Work More Profitable From an Educational Standpoint

Miss Elizabeth Burgess, inspector of Army Nurse Training School, Washington, D. C., said that the practical work of the student is profitable in many ways—to the patient, to the hospital, and to the student—to the latter in particular since it provides opportunity for drill in the various nursing procedures, makes possible familiarity with the clinical aspects of disease and provides needed opportunity for growth. Actually, the practical experience of the nurse often falls short; for instance, a course may be completed without training in the children's ward, usually because there is no children's ward to go to; without diet kitchen experience; after a course including ten or twelve months spent in the operating room and one month only in the care of patients; after a course including one year spent on special duty with private patients; after a course three-quarters of which is spent as a head nurse in charge of other students. Experience in the care of cases of contagion and mental and nervous diseases is lacking in the majority of cases.

In most schools the probationers are the most interested group of students. The opportunities for learning are much greater in practical work, but it is robbed of much of its value by the mental and physical weariness consequent on long hours of service; by the lack of relaxation and opportunity for refreshment; by the repetition of procedures longer than necessary for perfecting technique; by the lack of time to make connection between class work and practice; by the impossibility, owing to lack of proper equipment or lack of time, of carrying out the procedure in the ward as demonstrated in the class room; by service in one department extended beyond the time when there is new material or opporunity for acquisition of knowledge; by lack of stimulation due either to entire lack of criticism or to constant fault finding; by the requirement of the student of routine work such as might be performed by maids after it has ceased to have an educational value for her, and by the division of duties

in the wards so that a certain individual always does a certain group of things.

Some of the conditions which Miss Burgess believes would contribute toward the educational value of the practical experience are: Hours not exceeding eight; instruction always proceeding from the simple to the more difficult duties; stated responsibilities for each student, including a definite number of patients for whom she is responsible; head nurses chosen for teaching ability as well as executive ability; nurse instructors who give much more attention and time to teaching than they do in the majority of schools today.

Affiliation of Hospitals

Affiliation was suggested as one means of caring for the predominantly large number of surgical cases in hospitals. Affiliation is also necessary to afford a general training to male nurses, who are especially useful in institutions for mental diseases but who can not there receive full training. A number of superintendents report excellent results from the work of the male nurses. The important thing is that he must not be treated or regarded as an orderly.

In order to make affiliation practicable, nurses' helpers are necessary. They do all the ward work for from $25 to $40 a month and receive no training. The students are then started on the actual bodily care of the patients.

The principal difficulty in the way of affiliation is in the expense involved.

Policies for the Coming Year

At the final meeting it was decided that the league needed an interstate secretary; that the league should further the cause of rank for nurses (a committee was asked to draw up a resolution to present to Congress); that publicity was desirable to educate lay people on nursing questions and to increase the attendance in the training schools. The league stands firmly for the eight-hour day for pupil nurses, and its position is fully outlined in the pamphlets which it has issued to send to superintendents. It is prepared, though unwilling, to resort to wider publicity to achieve this end.

The position of the league on nursing attendants is outlined in the following resolution:

Resolved: That in the training of attendants the factor governing the length and the type of training should be the physical condition of the patient rather than his financial resources.

That attendants should be prepared to care for the following types of patients: Convalescent patients, aged and infirm, chronic and well children, and in other cases to supplement the service of the graduate nurse and when required to assume the duties of an intelligent mother.

Further, that in preparation for these duties, attendants should meet the following requirements and be given the following instruction:

Entrance qualifications: Age, eighteen; present evidence of good physical condition and moral standing; ability to read and write English and to keep simple bedside notes.

Type of institution in which training may be given: Homes for incurables; homes for the aged and infirm; homes for crippled children; tuberculosis sanatoriums, institutions for mental and nervous diseases and for epileptics.

Length of course: Six months in an institution, during which time the theoretical and practical instruction is given, and six months under supervision and with salary either in an institution or private home.

Outline of theoretical work: Ethics, five hours; household hygiene, personal hygiene, germs and their relation to disease, fifteen hours; elementary anatomy, five hours; physiology in relation to its practical application to other subjects, five hours; nutrition and cookery, to include its practical application, twenty hours; general nursing (including the household medicine chest and methods of administering medicine), twenty hours; nursing of children, of the chronic sick, of the aged, and of convalescents, ten hours; emergencies and first aid, five hours; total, eighty hours.

Be it further resolved: That it shall not be the policy of the league to initiate such training of attendants, but that when help is asked by other organizations, the preceding outline be presented as a basis for operation.

Information Bureau of the Red Cross

The information bureau of the Red Cross has been established in New York as a help for the nurses returning from overseas and for institutions in need of nursing help. Five thousand nurses have already returned from overseas. Each returning nurse receives a circular directing her to the bureau of information. Two hundred and seventy-one organizations have applied to this bureau for help. Of the nurses who have applied, 117 have been directed to public health work, 138 to visiting venereal disease work, to tuberculosis, Red Cross, Public Health Service, maternity, and mental hygiene work.

It has been impossible in this brief space even to abstract all of the valuable papers presented, but we hope to present some of them later.

* * * *

Rank for Army Nurses

At a recent meeting of the Santa Clara County Nurses' Association, San Jose, Cal., a resolution was adopted endorsing the conferring of rank upon army nurses and the reorganization of the Army Nurse Corps upon a sound basis to insure to its future members the respect, honor, and dignity already accorded British nurses. A copy of the resolutions was sent to the President and Secretary of War, as well as to the Senate and House of Representatives.

* * * *

Courses in Public Health

One of the most vital problems of the present moment to be met by the nation is the proper care and conservation of public health. This work is being assumed, with the sanction and support of the government, by the National Organization for Public Health Nursing, and Miss Ella Phillips Crandall, executive secretary, plans to organize the nursing forces of the country so as to have a public nurse at the head of each county for the education of the public in matters of health and hygiene. In response to her appeal that university women take up this work as a profession, the University of California offers the following courses: Principles of Public Health Nursing; the Field of Public Health Nursing; Social Problems in Public Health Nursing; History of Public Health Nursing; and Epidemiology for Public Health Nurses. The courses are offered to women already trained as graduate nurses and as elective courses for upper division students.

* * * *

University of Minnesota Public Health Nursing Course

The four months' course in public health nursing, which was given from November 1 to March 1 at the University of Minnesota, was found so successful that a similar course, to end July 1, immediately followed upon its completion. Thirteen graduates or senior nurses-in-training of accredited nurses' training schools finished the course, held under the supervision of the University Medical School and the Minnesota Public Health Association. The Minnesota Public Health Association elected the candidates to the course and paid four-fifths of their tuition fee. Responsibility of securing positions for those graduates of the course who have no definite plans has been assumed by the Minnesota Public Health Association.

QUERIES AND ANSWERS

Charitable Hospital Not Liable for Negligence of Employees

To the Editor of THE MODERN HOSPITAL:

"Please give me some information. This hospital is owned by the county. Because it is the only hospital in the city, we accept pay and part-pay, as well as indigent patients, but we make no profit on these cases. Our yearly report shows approximately 25 per cent strictly charity cases, and a number for which not enough was paid to cover expenses. We receive no charitable contributions or other outside aid.

"A short time ago, a patient became blistered on the buttocks and thighs through the accidental expulsion of a proctoclysis while she was semi-conscious. The patient's husband now claims $500 damages, which in my opinion is extortionate. The county commissioners have offered to pay for the extra treatment necessary to the amount of $150.

"I am anxious to learn the position of the hospital in case a suit is brought against it. Can you cite some decisions that have been made in cases of this nature?

"SUPERINTENDENT OF A COUNTY HOSPITAL."

It appears clearly that our correspondent's hospital is a charitable organization. Certainly it is not run for profit, and the fact that it cares for some part-pay and full-pay patients does not change the aspect of the hospital as a charitable hospital. On this point we may cite the case of the *New England Sanitarium* vs. the Inhabitants of Stoneham, 91 N. E. N. (Mass. 385) in which the court said:

"The dominant purpose for the promotion of which the institution was organized and has been maintained furnishes the test whether it is a charitable or a business organization conducted for commercial gain with incidental acts of charity."

The fact that a patient is a pay patient does not change the aspect of the case, as was shown in the case of Powers vs. the Massachusetts Homeopathic Hospital, 109 Federal Report 294, in which a pay patient in a charitable hospital sued for damages for negligence. The court settled the question whether the fact that a complainant was a pay patient changed the aspect of the case in the following words:

"In our opinion the difference is immaterial. As has been said, the defendant was a charitable organization, that is, a corporation organized exclusively for charity. That the ministration of such a hospital should be conducted exclusively for the indigent is not usual or desirable. Those of modest means from necessity and not a few rich people from choice resort to great charitable hospitals for treatment, especially in surgical cases."

Further, the court said: "In our opinion a paying patient in the defendant hospital as well as a non-paying patient seeks and receives services for a public charity."

From these decisions, which represent practically unanimous opinions of the courts in this country, it appears that our correspondent's hospital is a charitable hospital and that damages cannot be claimed so long as the hospital exercises reasonable care in the selection of assistants and attendants. We assume, of course, that the offer of the county commissioners to settle for $150.00 was not a recognition of legal liability but a further extension of the charity in providing the medical treatment required in the particular case. It hardly seems possible, therefore, that the complainant would have any sort of a case unless there are some peculiar provisions of the state laws with which we are not familiar.

The Most Serviceable Style of Hospital Windows

To the Editor of THE MODERN HOSPITAL:

"Is the double-hung sash as serviceable a hospital window as can be obtained? What are the objections to the casement window? What, in your opinion, are the characteristics of an ideal hospital window?

"HOSPITAL SUPERINTENDENT."

An ideal hospital window should have a durable frame, should be simply constructed, should be weather-tight, should permit of some direct ventilation without creating disagreeable drafts, should permit of cleaning from the inside (reversibility), should permit of various degrees of opening (up to 100 per cent for ventilation in summer), should have a minimum number of subdivisions or sections (thus affording maximum transparency), should permit of the ready application of fly-screens, should not interfere with the convenient operation of awnings, shades, or curtains; and the window, when open, should not extend so far into the room as to interfere with the free use of the room space.

I know of no hospital window which fully meets all of these requirements, but inasmuch as some of the characteristics which are called for seem to be mutually exclusive, this is not altogether surprising. There are a number of excellent windows on the market which would score fairly high on a scale based upon the requirements enumerated above.

S. S. GOLDWATER.

LETTERS TO THE EDITOR

Washing Spots from Soiled Linen

To the Editor of THE MODERN HOSPITAL:

"All spots must be washed off all linen before it is thrown down the chute" is certainly a *dangerous*, filthy, disagreeable, unnecessary practice. Just think of the inconsistency of having the nurses handle all pus linen (for instance, binders from empyema cases) with forceps in the patient's room and then take it to the hopper and wash that, as well as any linen stained by blood, fecal matter, vaginal discharge, etc., by hand!

Why can't all such linen be collected in large cans on the floors, and taken to the laundry at stated intervals? There a washer could be set aside and used to soak and wash out, in cold water, such material before it goes into the general laundry. Or the hospitals who are still foolish enough to send their linen to a commercial laundry could keep an ordinary washing machine in their service room, and, since most hospital superintendents seem to think that all disagreeable work must be done by nurses, assign a nurse at the time to do this by a more sanitary method. The present method, I am sure, is responsible for many infections.

FORMER HOSPITAL SUPERINTENDENT.

The American Red Cross has appropriated $65,000 to enable the American Women's Hospital Association to send a mobile hospital unit to Serbia for relief work in connection with typhus and other epidemics. Of this amount $25,000 is a cash donation, the balance representing supplies to be provided from existing stocks in Europe.

DISPENSARY AND OUT-PATIENT WORK

Conducted by MICHAEL M. DAVIS, Jr.
Director of the Boston Dispensary.
Please address items of news and inquiries regarding Dispensary and Out-Patient Work to the editor of this department, 25 Bennett street, Boston, Mass.

THE SOCIAL WORKER AS CLINIC EXECUTIVE

Clinic Executive a Humanizing Element of the Dispensary Organization—Must Be Temperamentally Fitted for Her Work—Social Service Experience More Important Than Medical

BY BERTHA CHACE LOVELL, Boston Dispensary, Boston

In a paper in the June issue of THE MODERN HOSPITAL, I attempted to define the functions of the clinic executive. I represented her as absorbed in the job of keeping the patient and the doctor together until such time as the former had no need of the latter's services and accomplishing this rather difficult, though far from thankless task, by making both doctor and patient feel that the clinic was satisfying the demands that each made upon it.

A chance to devote himself to the diagnosis and treatment of the patients who need him, with no exasperating hitches and halts in the machinery of clinic administration and no unnecessary interruptions by people he doesn't want to see; a chance, too, to find out more about a patient's medical and social background than he can learn in a hurried first interview—these are the doctor's demands. The patient's demands bulk larger—"ordinary creature comforts in the building itself, no exaggerated waits in the ante-room of the clinic, a square deal as to the order in which he is admitted to the doctor, an understanding of the medical situation that meets his intellectual and emotional needs, such arrangements as to payment or non-payment of fees as can be fitted into his scheme of life, and a firm but persuasive hand stretched out from the clinic to draw him back if he stops his treatment too soon."

The clinic executive, therefore, must juggle with many balls and must keep them all from falling. If creature comforts are lacking and if the patients wait each day for hours in the ante-room before they are treated, the clinic executive will have something to report to those whose actions will alter conditions. If the clinic machinery is rusty or broken, she can oil or mend it. If people outside the clinic and within it need explanations and interpretations that mean much of repetition, and much, very much of patience and understanding, the clinic executive can generally send them forth content.

She writes letters about patients and to them. She takes social histories. She knows which man should be urged to pay out-patient fees and which woman should be given car fares home. She sees that an urgent reminder reaches every patient who stays away from the clinic without known cause and that no one who has returned because of such a reminder leaves the clinic without a chance to tell his story. If his story—if any story she hears—seems to her to indicate that the patient is in special need, whether it be of food or of a new viewpoint on life, she attempts to find out how it can best be met.

The question as to who the clinic executive shall be—whether she shall have special training for her job, in other words—is coming to be a very pressing problem.

There are three groups which might presumably be drawn upon for candidates, women with secretarial training and experience, public health nurses, and medical social workers. It is evident that all these groups could furnish clinic executives who would qualify well for certain aspects of the job.

The trained secretary would be especially well fitted to attend to the machinery of the clinic organization. She knows how to file and how to classify. She understands the latest and best methods of bookkeeping. She could install a system of "follow-up" which would be reliable and at the same time easy to operate. Her statistics would be accurate.

Into the question of human relationships, however, the relation, for example, of one individual to another, or of an individual to his own physical handicaps, the secretary's training has not carried her far. The danger would lie in her tendency to feel that the aim of the clinic was realized, as far, at least, as her connection with it was concerned, with the achievement of a smoothly running machine.

The public health nurse would unquestionably have advantages from the medical point of view. She comes from the hospital with a very real working knowledge of physiology and hygiene and a helpful understanding of the use of drugs, of the significance of various diseases and physical maladjustments, and of the procedure of treatment commonly employed in handling them. She is accustomed to deal with sick people. Her special technique, however, a technique which in certain aspects at least is difficult of execution and acquired only by long practice, she will have no chance whatsoever, as clinic executive, to put to use. She has no need of sponge or syringe or scalpel. She will not wait—except in a neighborly fashion—upon either doctor or patient. It is her knowledge of the after effects of typhoid fever that will count in her favor, not her deftness in administering a typhoid bath. She need not know the difference between a tenaculum and a pipet. The position of clinic executive, that is, does not offer her a field in which her own peculiar skill can find even a limited expression.

The chief function of the clinic executive is a social one. She is primarily a social diagnostician, a social practitioner, and a social interpreter. Unless she has had thorough training in the technique of social work and is well grounded in what might be called the social worker's "materia medica"—the knowledge, that is, of the social resources that can be tapped in a community for the benefit of the individual or group—how can she adequately fulfill these functions? How can she attempt to deal with the problems of character, of heredity and environment, unless she has been guided by wise teaching towards some vital understanding of the principles that underlie these problems?

The clinic executive must be a thinker, for she is a co-worker with the doctor. As he initiates in his line, so does she in hers. As he makes use of his technical skill, gained by experience, his knowledge of the significance of presenting mental and physical symptoms, his judgment as to the urgency of action in a given case, and the right method of treatment to pursue, so must she make

use of her own knowledge and judgment in another field. Both will need imagination and insight, for they are dealing with human beings. Both will need a scientific viewpoint, for they are pledged by the very nature of their work to seek out the truth without prejudice and without fear of bringing unwelcome facts to light.

As social diagnostician, the clinic executive studies both the clinic as a whole and the individual patient; for clinics, as well as patients, have their own individualities. They have atmosphere, they have morale. They wilt, or they stimulate. They are confused and rumble with a suppressed resentment or they are centers of enlightenment as well as of healing. The clinic executive will be aware of the special pitfalls her own particular clinic presents; in one perhaps it will be the tendency toward a certain looseness of speech among the patients on the waiting benches, in a second the disposition on the part of a late comer to steal the turn of a patient who arrived earlier. Whatever it may be, to the clinic executive it will seem worthy of consideration.

Almost as significant a symptom, however, of the morale of the clinic as the tone of the waiting room, is the increase or decrease in the average number of visits per patient and the rise or drop in the number of patients who are lost from the clinic without known cause. The clinic executive needs not only to understand how to keep statistics, but she needs to know what statistics to keep, *and how to pluck their meaning from them*, so that she can size up her problem and determine in what sector her next drive must be made. She will learn, for example, what group of patients need home visits before they become regular in their attendance at the clinic, and how the patients who are being sent in by outside social agencies compare with the patients who come to the clinic of their own accord in regard to the rate at which they drop out of the clinic. Figures, figures rightly interpreted, will give her a basis for action.

If the clinic executive has really "made good" in her work and has won the confidence of the chief of the clinic, she will, no doubt, get from him considerable insight into many of the deeper problems of clinic organization and can share with him his hopes for clinic expansion and development. Knowing what phases of clinic activities he wishes to have emphasized she can use her influence intelligently in those directions.

Quite as important as the clinic executive's study of the clinic as a whole, is that of her function as social diagnostician for each and every patient in the clinic for whom she assumes responsibility. To this she must bring whatever of art and skill as social worker she possesses.

Much of her diagnosis is necessarily based upon surface symptoms. She will be liable to frequent error. But like the dermatologist who sees a small skin sore and calls it a pustule of chicken pox, then sees another and calls it a primary lesion of syphilis, she will distinguish between the slight and temporary social disability and the situation that can only be remedied by drastic measures. She will know, as does the dermatologist, that certain diagnoses need to be confirmed by further tests or investigations, and the greater her skill, the greater will be her use of all the aids the social resources of the community can offer.

There are four groups into which the patients she is supervising will fall: (1) those that need no services other than the routine services of the clinic; (2) those that need special attention only when an unusual problem arises; (3) those that need to be closely watched throughout treatment; and (4) those that need more exhaustive study and constructive action than the clinic provides opportunity for. These groups are inevitably in flux. Patients from Groups 1, 2, and 3 may any day shift into Group 4 and later come back into their original place. It is only by knowing each patient's problems as best she may and being always on the alert for self-revelations by word of mouth and for symptomatic behavior that she can hope to discover the patients who are most desperately in need of social service help.

Her vigilance must be never-ending, for, in any but a very small clinic, it is only an inconsiderable proportion of the patients who can have the benefit of a searching study of their social problems. The clinic executive realizes that the amount of work she can do will always fall far short of that which should be done. She does not attempt to scale the infinite. She tries to select wisely. The important fact is this—if she is a well-trained social worker, she will often recognize from symptoms that to an untrained worker might be of no significance, an arresting situation.

After she has made a social diagnosis, the clinic executive acts upon it. Both within and without the clinic she functions as social practitioner. Typical of the problems she is called upon to meet within the clinic is that of explaining to a patient why a piece of orthopedic apparatus may be worth what seems to him a prodigious sum of money, and the need, just as imperative, of seeing that he returns to the clinic to have the apparatus inspected and adjusted as often as the doctor considers necessary. Or she may decide to refer to a child-placing agency a woman who should undergo a surgical operation but hesitates because her children have no relative with whom they can stay in her absence.

Necessarily much of her treatment within the clinic will be by nothing more tangible than words. If, however, "human nature is sure one hundred per cent psychology," the value of the clinic executive's accessibility whenever trouble is brewing on a patient's horizon is very great. Particularly is this so if she happens to be open-minded, intelligent, sympathetic, and resourceful. The center of many a problem, especially in a nerve clinic or in a clinic for the treatment of one of the venereal diseases, is a distorted point of view.

The clinic executive can be of very real assistance to the patient who, while under the supervision of a social worker outside the clinic, is taking clinic treatment. The clinic executive can both talk and listen, and will often get interesting side lights on a social situation that the outside worker is lying awake nights to solve. It may easily happen that a patient who is labeled "uncooperative" in a relief agency may be revealed as only unusually slow of comprehension, or perhaps as intent on shielding an erring member of her family whose story she can first bring herself to tell in the medical atmosphere of the clinic.

A most important form of clinic treatment, depending directly, in every case, upon the social diagnosis she has made, is, of course, the clinic executive's decision as to whether or not the patient can meet the clinic fees. Without regular attendance at the clinic the patient's chances of recovery, are, in most instances, diminished, and his attendance is admittedly influenced by the state of his pocketbook.

Not the least of the clinic executive's duties within the clinic is the ever-present task of writing letters to delinquent patients. Even though her letters generally bring a high percentage of returns because they are written, in every instance, to one whose circumstances

she knows, there are times when she must resort to a "follow-up" call. Her calls on patients remiss in their attendance represent practically her only function without the clinic. It is one that she is especially qualified to fulfill, however, if she is a trained social worker whose experience has included many home visits of a great variety of types. I should even go so far as to advise that every clinic executive have some time allotted for intensive case-work on a small group of cases, so that she may study at first hand into some of the most baffling of the problems of personality and of environment that force themselves into her day's work. To do the most effective work within the clinic she must keep in close touch with the homes her patients come from, and the people her patients live among. She needs to pit her skill, at least occasionally, against all phases of a problem, no matter in what guise it presents itself and however far it may lead from the clinic.

However, for the main bulk of her intensive case work, she will always have to depend upon some worker either inside or outside the clinic who is devoting herself to that particular type of social work.

As a social interpreter the clinic executive again relies on her training and experience as a social worker. An interpreter must not only speak two languages; he must be an adept in both. He must be able to distinguish even the finest shades of meaning.

Since the clinic executive speaks the language both of the clinic and of the social service agency, she, better than any one else, knows what the social worker outside the clinic needs to obtain from the doctor in the way of fact and opinion. She can receive it from him with the minimum expenditure of time and effort. Her version of it is, or should be, correct. On the other hand, she has learned to distinguish between the kind of social facts the doctor wishes to know—or may profit by knowing—and those that do not concern him, and can present her facts to him in a telling manner, from whatever source she has gleaned them.

The clinic executive acts as an interpreter also between the patient and the hospital or out-patient department. She is in the institution, and yet, in a very real sense, not of it. It is the chief of her qualifications perhaps that she is non-institutionalized. She knows the organization of the institution, she understands its rules and regulations, and the necessity for their formulation. But she has as well a very conscious loyalty to the interests of the individual patient. While she cares very sincerely that the clinic shall run in such a fashion that its standard of medical and nursing service rank high, she cares equally that Mr. A and Mrs. B be considered as personalities who differ in tradition, in race, and in social status, and who cannot be treated as automatons of identical figure without serious risk of thwarting the end for which the institution exists—the public good. She can be counted upon as a dependable aid to all the forces within the hospital or out-patient department that are working to keep the institution human.

Where, then is the clinic executive to be found—the clinic executive who is social diagnostician, social practitioner, and social interpreter, and who has, besides, such knowledge of the significance of physical disability and physical well-being in the life of the individual and the community that she can function as an intelligent factor in an out-patient clinic? A certain number will undoubtedly be drawn from the ranks of those trained social workers who have acquired, as part of their training, a clear understanding of some of the most important social aspects of medicine. The opportunities to acquire this type of training are increasing, as the need for medical social workers becomes increasingly apparent. The schools for social work and philanthropy are now including in their curriculums lectures and even, in some instances, definite courses in social medicine, and are providing opportunities for observation and practice work in clinics and hospitals. The fact that the graduates of these courses are still few in number does not mean that the movement is insignificant. If, however, the choice must be made between a clinic executive who lacks medical knowledge and a clinic executive who lacks social understanding and vision, it seems essential that that worker be chosen who can truly be called a *social* worker.

JANE DELANO, R.N.—AN APPRECIATION*

With a Mother-Heart, Working Ever for "Her Boys" and Working to Win the War, Her Last Words Were, "I Must Get to My Work"

By CHARLES A. DREW, M.D., Superintendent, Worcester City Hospital, Worcester, Mass.

On the fifteenth day of last April, Jane A. Delano died in Savigny, France. I never saw Miss Delano to know her. But I do know that in her the nursing profession of America lost one of its most honored members.

To a sister nurse who stood by her side as she was recovering from ether given for a fourth operation on a suppurating mastoid, Miss Delano said, "But what about my work? I must get to my work." These were her last words. We never heard that Jane Delano was a saint. She doubtless had her faults and limitations. Had she been perfect she would not have been interesting to us. Her mind was not much concerned with the thought of death which she must have realized was dangerously near.

Nurses and doctors are not good patients as a rule—they know the danger signals too well. The heart of Jane Delano was still with her work. Working for "her boys" and working to win the war. All the honors she could hope for had been hers. It was not of honor and fame she was thinking, but of her work which to her was the greatest thing on earth.

Was it wise for Jane Delano to be so absorbed in her work? It seemed to some as if she had so glorified her work as to make it her religion. Was this the highest wisdom? We do not venture to judge. One's viewpoint would depend on his conceptions of the work and his notion of religion. Jane Delano in the last hour of her life was thinking, not of her soul's salvation but of her work, and her work was largely the helping and saving of others.

Was it wise for Jane Delano to give to her work the devotion she might have lavished on husband, home, and children? She was physically and mentally beautiful in her young womanhood and to some, even more beautiful when her hair was white. Many have said: "What a noble mother she might have been!"

Jane Delano spoke often of the suffering of "her boys" in France with moist eyes. The mother instinct would claim its own. The mother-heart beat just as warmly for "her boys" as if they had been, indeed, of her own blood. It was largely her nature, but partly her whole-souled devotion to her work that made her what she was.

I want to leave the thought of Jane Delano and her work in the minds of those who may follow her as my contribution to your memory of this evening.

*Address to the Graduating Class, Training School for Nurses, Worcester Hospital, June 17, 1919.

BULLETIN OF THE AMERICAN HOSPITAL ASSOCIATION

Offices:
728 Seventeenth Street, Washington, D. C.
308 Anisfield Building, Cleveland, Ohio
Monthly Bulletin issued by the Executive Secretary
308 Anisfield Building, Cleveland, Ohio
HOWELL WRIGHT Executive Secretary

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No hospital in the country can afford to miss being represented at the coming meeting of the American Hospital Association. It is the first meeting held after the adoption of the hospital membership plan; it is the first meeting held after the end of the war. It is to cover an exceedingly wide range of most practical and vital topics, of interest to public health officials as well as to hospital trustees, superintendents, superintendents of nurses, dietitians, stewards, and social workers. These topics include hospital standardization, the proper relation between the state and private hospital, workmen's compensation, and sickness and health insurance, and their relation to the hospital, every-day problems of hospital construction and administration, training of pupil nurses, increased cost of food and food service, out-patient and other extension work. In addition to the non-commercial and commercial exhibits, there will be an architectural exhibit, at which plans and models will be shown and talks given by well-known hospital consultants. The president and secretary have issued the following call:

"To the Trustees and Managers of American Hospitals:

"Your cooperation is needed in an organized effort to work out the 'every-day' and 'after-the-war' problems which now face American hospitals. Hospitals, as other industries, must pass through this period of 'reconstruction.'

"During the war the hospitals of America performed important services. They served as emergency stations in demobilization and transportation of troops; performed various corrective operations making men eligible for service; assisted recruiting officers in determining exact physical condition of applicants for enlistment; they contributed to the problem of providing medical assistance to the families of men in the service; undertook to train increased numbers of pupil nurses; *they willingly submitted to the wrecking of organization by the fact that the greater number of their staffs, interns, and graduate nurses entered the service.* Hospitals must recover and advance.

"'Hospital standardization' is dominant in the hospital mind today. Distinct progress with this problem must be made *now.* The service of hospitals to public health is another problem. Did the hospitals meet the demands of the public in the recent influenza epidemic as they should? If not, what is wrong? What is the proper relation between the state and the private hospital? Workmen's compensation is now before many hospitals and is often a problem. Sickness and health insurance will soon follow. There are also the 'every-day' problems of hospital administration, hospital construction, out-patient work, the training of pupil-nurses, the problem of the present increased cost of food and food service. There are many others. They must be met. Many of them can be solved only by state- and nation-wide hospital organization.

"Institutional membership in the American Hospital Association provides a nation-wide organization with other hospitals and an opportunity to participate in the activities of the Association. *You are urged to participate as an institutional member* and to make use of the enclosed application blank. Advantages of this membership are emphasized in the enclosed editorial. Whether your hospital is now, or becomes, a member of the association or not, *you are urged to send your representatives* to the twenty-first annual convention, September 8-12, 1919, Cincinnati, Ohio. Participation in this meeting will demonstrate the full value of institutional membership to your hospital.

"Please communicate with the secretary for further information.

"For the American Hospital Association,
"HOWELL WRIGHT, Executive Secretary. A. R. WARNER, President."

That the convention will be made welcome by the city of Cincinnati and the local hospital profession is evident from the following letters of welcome from Mayor Galvin and Major Holmes, the chairman of the local committee of arrangements:

"To the Members of the American Hospital Association:

"Understanding that your convention is to be held in our city during the week of September 8-12 of the present year, as the chief executive of the city, I wish to extend to each one of you a most hearty welcome, and to let you understand that our citizens generally greatly appreciate the fact that your annual gathering is to be held here with us.

"I feel that you will not regret for a moment that your organization decided upon the Queen City for their place

AMERICAN HOSPITAL ASSOCIATION

Twenty-first Annual Convention

(The American Dietetic Association meets jointly at its second annual convention with the American Hospital Association.)

Headquarters—Hotel Gibson, Cincinnati, Ohio
September 8-12, 1919.

PURPOSE

This convention is intended to be of practical value to the Public Health official as well as the hospital trustee, superintendent, superintendent of nurses, dietitian, steward and social worker.

Practical, "every-day" as well as "after-the-war" hospital problems will be discussed and considered. No American Hospital should be without representation at this meeting.

QUESTIONS AND ISSUES TO BE DISCUSSED AND SETTLED

Did the Hospitals meet the demands of the public in the recent influenza epidemic? If not, what is wrong?

Hospital Standardization (the dominant problem in the hospital mind today). Something must be done about it now. What shall it be? How shall it be done?

What is the proper relation between the state and the private hospital? State and nation wide hospital organization.

Workmen's compensation and the hospitals. Sickness and health insurance.

The "every-day" problems involved in—
- Hospital Construction
- Hospital administration
- Training of pupil nurses
- Increased cost of food and food service
- Out-patient and other extension work.

IMPORTANT EXHIBITS

ARCHITECT'S EXHIBIT. It will show plans, sketches, blue prints, pictures, models. There will be practical talks on hospital construction by well-known hospital consultants.

NON-COMMERCIAL EXHIBIT. Hospital forms, records, etc. Hospital economies and hospital methods.

COMMERCIAL EXHIBIT. The Association will have its largest hospital commercial exhibit.

Make your Hotel Reservations Early. For additional information write the Secretary.

AMERICAN HOSPITAL ASSOCIATION,
308 Anisfield Building, Cleveland, Ohio.

of gathering, and there will be a warmth of hospitality extended to you, such as I believe you will appreciate and enjoy.

"We are honored to have you as our guests.

"Come to us at as early a date as you can, and stay here as long as your business and other engagements will permit.

"Very respectfully,
"JOHN GALVIN,
Mayor."

"Members and Friends—American Hospital Association:

"As chairman of the Cincinnati committee on arrangements for the annual meeting of the American Hospital Association, which comes to Cincinnati September 8 to 12 I extend to you a cordial invitation to be present at the meeting which we hope to make the greatest in the history of the organization.

"We are proud to have the members of the American Hospital Association as our guests. We want you to come here and have a beneficial and pleasant visit with us. We want you to carry away a good impression of the Queen City.

"The Cincinnati committee on arrangements will spare no effort to make your stay here one long to be remembered and we sincerely hope that the members of the association will attend in large numbers.

"While here we want you to see our many spots of interest. Naturally, we are anxious to have you visit our general hospital and have arranged to have the sessions on one day of the meeting held at the hospital to give the members an opportunity to inspect it thoroughly. We feel sure that this visit to the Cincinnati General Hospital alone will be worth the effort you may make to attend the convention.

"We don't want you to rush in and rush out. Come to Cincinnati early and spend as long a time as possible with us.

"Again bidding you a most hearty welcome to the Cincinnati convention, I am,

"Sincerely yours,
"C. R. HOLMES,
Chairman."

Tentative Program, Twenty-first Annual Convention, American Hospital Association; Second Annual Convention, American Dietetic Association

General sessions and the majority of the section meetings will be held in the Hotel Gibson. Section meetings will also be held in Hotel Sinton, across the street from the Hotel Gibson, and at the University of Cincinnati Medical School and Cincinnati General Hospital. Complete program will appear in the Pre-Convention number of THE MODERN HOSPITAL (September). It will include the place and number of the hall or room assigned for each meeting.

MONDAY, SEPTEMBER 8

AFTERNOON, 3 P. M.

Registration.

EVENING

Informal gathering, music, inspection of exhibits.

TUESDAY, SEPTEMBER 9

MORNING, 10 A. M.

General Session

Formal opening of the convention.
Major C. R. Holmes, chairman of the local committee, presiding.
Address of welcome, The Mayor of Cincinnati.
Address, The Governor of Ohio.
President's Address, Dr. A. R. Warner, President.

AFTERNOON, 2 P. M.

Section Meetings

Section on Out-Patient Work, Mr. Michael M. Davis, Jr., Chairman.
Subjects for Papers and Discussions (speakers to be announced):
- Clinics for Venereal Disease.
- The Work of the Catholic Hospital Association in Connection with Dispensaries.
- Dispensaries and Health Insurance.
- Round table discussions of points raised by members of Section.

Section on Hospital Construction, Dr. George O'Hanlon, Chairman.
- Fire Hazard in Hospital Buildings—Extent and Remedial Measures, Mr. W. D. Crowe.
- New Features of Hospital Building Equipment, Mr. E. F. Stevens.
- When to Plan and When to Build, Mr. Wm. O. Ludlow.
- In Planning a Hospital, Build with Reference to Its Future Development, Mr. Oliver H. Bartine.
- Discussion, Miss Jean Allison Hunter, Grace Hospital, New Haven.
- Departmental Division of Heat, Light, and Power Costs, Mr. D. D. Kimball, Dr. H. M. Pollock.

Section on Nursing, Miss Elizabeth A. Greener, Chairman.
Subjects for Papers and Discussions (speakers to be announced).
- The Nursing Situation from the Standpoint of the Large University Hospital.
- The Nursing Situation from the Standpoint of the Medium-Sized Hospital Without University Connections.
- The Nursing Situation from the Public Health Point of View.
- The Nursing Situation with Regard to Future Military Nursing Needs of the Country.

Section on Dietetics, Miss Lulu Graves, Chairman.
(See Program of American Dietetic Association.)[1]

EVENING, 8 P. M.

Reception and Inspection of Exhibits.

WEDNESDAY, SEPTEMBER 10

MORNING, 10 A. M.

General Session, Subject, Hospital Standardization.
Joint Session of the American Hospital Association and American Conference on Hospitals.

AFTERNOON, 2 P. M.

General Session.

Joint session of the American Hospital Association and American Conference on Hospitals.

EVENING, 8 P. M.

Special meeting for state delegates appointed by the governors, prominent governmental official presiding.

Special Subject: Hospitals and the State.
(Speakers to be announced.)

1. Present Relations Between Hospitals and the State Governments.
2. Did the Hospitals Meet the Demands of the Public in the Recent Influenza Epidemic?
3. What Is the Proper Relation Between the Hospitals and the State?
4. Workmen's Compensation and the Hospitals.
5. Sickness and Health Insurance and the Hospitals.

THURSDAY, SEPTEMBER 11

MORNING, 9 A. M.

Visit to Cincinnati General Hospital and University of Cincinnati Medical School.

10:30 A. M.

Section meetings at the Medical School and the Hospital.
Section on Social Service.
Section on Dietetics.
(See program of the American Dietetic Association.)[1]
Section on Hospital Administration.

AFTERNOON, 3 P. M.

Special round-table meeting under the direction of Mr. Asa S. Bacon, presiding.

EVENING

No schedule.

FRIDAY, SEPTEMBER 12

MORNING, 10 A. M.

General Session.

Joint Session of the American Hospital Association and the American Dietetic Association.

AFTERNOON, 2 P. M.

General Session.

Reports of committees.
Election of officers.
Other business of the association.

EVENING

General Session.

Adjournment dinner, special program of speakers.

Plans for Architect's Exhibit

Plans for a really splendid, instructive, and profitable display and symposium on hospital plans and principles of construction, for the Cincinnati Convention, are now practically completed and they assure one of the most interesting and instructive features that we have ever had at any hospital convention.

Ample space (708 square feet) in the form of a large room (Room D, Mezzanine floor, Hotel Gibson) has been set aside for this particular display and the physical arrangement will be such that plans can be shown by classes of hospitals.

The arrangement contemplates division of plans into the following classes: (1) large general hospital groups; (2) medium-sized general hospital groups, approximately 150 beds; (3) small community general hospitals; (4) isolation hospitals; (5) isolation units in general hospitals, large and small; (6) venereal hospitals; (7) venereal units in general hospitals; (8) maternity hospitals; (9) maternity units in general hospitals; (10) tuberculosis hospitals; (11) tuberculosis units in general

[1] The program on Dietetics will be found in the Department of Hospital, Medical and Special Meetings on page 140.

hospitals; (12) children's hospitals; (13) children's units in general hospitals; (14) orthopedic and reconstruction hospitals and units in general hospitals.

It may be desirable, when all plans are in and the exhibit set up, to group each special hospital with the unit of the same character in general hospitals so that the whole subject of that specialty can be discussed in the symposium.

It is thought desirable not to make a definite program as to the times of day and the days upon which talks are to be given on these various architectural and construction problems and that it will be better to wait until the convention opens and then announce by bulletin precisely when the various talks are to be given and by whom.

All the architects who are known to have created really constructive hospital work have been invited to participate in this exhibit, and with the now classified arrangement of the hospitals, attendants at the convention can be present at those meetings that are to discuss the particular subjects in which they happen to be interested at the time.

The convention is drawing rapidly near, and to save time it is desirable that architects who wish to show plans, and superintendents of hospitals who have plans which they think will be of interest and profit and who would be willing to show them in this exhibit, will please communicate directly with Dr. John A. Hornsby, special secretary of the association, who has the exhibit in charge, at his office, Munsey Building, Washington, D. C.

Institutional Membership

Up to date, 147 hospitals have applied for institutional membership. Of this number 126 have been approved by the Membership Committee and membership certificates issued. The following hospitals have applied since the last bulletin was published:

Robert Packer Hospital, Sayre, Pa.
St. Mary's Hospital Corporation, Waterbury, Conn.
Norwegian-American Hospital, Chicago, Ill.
German Evangelical Deaconess, Chicago, Ill.
Rochester General Hospital, Rochester, N. Y.
Protestant Deaconess Hospital, Evansville, Ind.
St. Albans Hospital, St. Albans, Vt.
Montefiore Home, New York, N. Y.
Miami City Hospital, Miami, Fla.
City Hospital, Bellaire, O.
Good Samaritan Hospital, Zanesville, O.
The Swedish Hospital, Minneapolis, Minn.
Sherman Hospital, Elgin, Ill.
The Lawrence and Memorial Hospitals, New London, Conn.
St. Louis Maternity Hospital, St. Louis, Mo.
Saginaw General Hospital, Saginaw, Mich.
Hillsboro Hospital, Hillsboro, Wis.
Cleveland Homeopathic, Cleveland, O.
Fremont Hospital, Fremont, Neb.
Hospital of Woman's Medical College, Philadelphia, Pa.
Springfield Hospital, Springfield, Mass.

Appointment of delegates to represent institutional members.

Every institutional member is expected to appoint three delegates to represent it at the convention. Cards have been sent to all applicants, upon which they have been requested to write the names and addresses of their representatives. A number have not replied. It is important that these names be sent in at the earliest possible moment. There will be special registration for institutional delegates at the convention.

Non-Commercial Exhibit

The following bulletin is being mailed to Institutional Members and others. The Secretary urges hospitals to cooperate with the local committee in making the proposed non-commercial exhibit an unusual success.

The non-commercial exhibit, arranged by a special local committee, is to be one of the features of the twenty-first annual convention of the American Hospital Association, Cincinnati, Ohio, Hotel Gibson, September 8-12, 1919. The exhibit will be arranged in room A on the Mezzanine floor, Gibson Hotel, headquarters. The committee desires your assistance and cooperation. Originality and quality is desired rather than quantity. The following suggestions have been made:

1. Hospital pictures of interest showing both exterior and interior of hospital.
2. Interesting reports and hospital forms and records.
3. New or original hospital devices or apparatus.
4. Economies promoted.
5. Exhibits of forms, reprints and other literature.

Hospital dolls, exhibited to show uniforms, and *nurses' uniforms* are not desired.

Hospitals desiring to exhibit are requested to communicate with the chairman of the committee. *Please reply on the enclosed card.*

COMMITTEE ON NON-COMMERCIAL EXHIBIT,
ALICE THATCHER, Chairman,
Chamber of Commerce, Cincinnati, O.

Commercial Exhibit

The commercial exhibit promises to be the largest the Association has ever arranged. Members are urged to familiarize themselves with the names of the exhibitors before the convention. Special plans are being made to afford ample opportunity for the inspection of exhibits.

COMMERCIAL EXHIBITORS

1919

Room	
II	Meinecke & Co.
III	Simmons Company-Burton-Dixie Corporation.
IV	Thorner Bros.
V	Lewis Mfg. Co.
VI	American Laundry Machine Co.
VII	Coast Products Co.
Space	
101	J. B. Ford Co.
102	Lyon Mfg. Co. Breathing machine.
103	J. B. Lippincott.
104	Born Steel Range Co.
105	Aluminum Cooking Utensil Co.
106	Life Saving Devices Co.
107	Klearflax Linen Rug Co.
108	Becton, Dickinson & Co.
109	Dennison Mfg. Co.
110	Pfaudler Co.
111	Holtzer-Cabot Electric Co.
201-202	Columbus Aseptic Furniture Co.
203	Genesee Pure Food Co.
204-5-6	Max Wocher & Son Co.
207-208	Albert Pick & Co.
209-210	Watters Laboratories.
211	Colson Co.
301	Horlick's Malted Milk Co.
302	Sanitary Cup Co.
302	Randall-Faichney Co., Inc.
304-305	Frank A. Hall & Sons.
306	Brick Sales Co.
307	H. W. Baker Linen Co.
308	Lyons Sanitary Urn Co.
309	B. Lowenfels Co.
310-311	Frank S. Betz Co.
312	Borden's Condensed Milk Co.
313	Safety Anesthesia Apparatus Concern.
401	Randles Mfg. Co.
402	Kimberly-Clark Co.
403	Taylor Instrument Companies.
404	Powell & Giberson Linen Co.
405	Wilmot Castle Co.
406	Takamine Laboratory, Inc.
407	American Sterilizer Co.
408-409	J. L. Mott Iron Works.
410	Hollister-Wilson Laboratories.
411	Bromley-Merseles Mfg. Co., Inc.
412-13-14-15	H. D. Dougherty & Co., Inc.
1-2	S. Gumpert & Co.
3	Thompson's Malted Food Co.
12	Hungerford Smith Co., J.
13	Royal Baking Powder Co.
23	Calumet Tea & Coffee Co.
24	Mellin's Food Co.
9-10	John Sexton & Co.
11	Wagner Mfg. Co.
Table Space	Hospital Management.
	THE MODERN HOSPITAL.
	Social Service Quarterly.

Special Garage Facilities for Motor Parties

Arrangements have been made with the Citizen's Motor Car Company to take care of all automobile parties ex-

pecting to reach the convention city by motor. This garage, one of the largest in Cincinnati, is located at the corner of Seventh and Main Streets, just three blocks from the Hotel Gibson and Hotel Sinton.

Storage charges at this garage are 75 cents for 12 hours or less, $1.25 for from 12 to 18 hours, $1.50 for from 18 to 24 hours. These charges include besides storage such ordinary services as air in tires, water in radiator and the like. An extensive repair department is also conducted by this garage which would be available for those who would need major repairs.

Charges for repairs are in line with other parts of the country.

Special Convention Rates

Delegates can secure rates of one and one-third of the general tariff; that is, they pay full fare to Cincinnati to attend the convention and can secure their return ticket home for one-third of the regular amount of fare. To secure the advantage of this reduced fare, delegates must secure a certificate from railroad officials at the time they purchase their ticket to Cincinnati. This certificate must be signed by an official of the railroad and also by the purchaser, and when the delegate arrives in Cincinnati it must be turned over to some official (who will be designated during the time of the convention) for validation.

Two hundred and fifty such certificates must be turned over to the validation officer before the railroads will grant the reduced convention rates, therefore, all delegates should make it a point to provide themselves with certificates. Delegates taking advantage of the reduced fare are required to return home over the same route used in coming to Cincinnati to attend the convention. They must also arrange their affairs so as to leave Cincinnati within three days after the close of the convention.

Delegates can learn at their local ticket offices at what date the railroad officials will begin issuing certificates with going tickets to entitle them to a return ticket for one-third fare.

These certificates will not be issued to persons purchasing child's half-fare tickets, or clergy, charity, or employee's tickets.

1918 Proceedings

The 1918 Proceedings are now being distributed. A copy is being mailed to all members whose dues are paid up to and including the year 1918. Three copies are being sent to each Institutional Member. These are addressed to the delegates appointed to represent the hospital but in the case of hospitals which have appointed no delegates, three copies are being sent to the hospital direct.

Special Plans for the Care of Catholic Sisters Attending the Convention

Special arrangements are being made for the care and comfort of Catholic Sisters attending the Convention. There are numerous Catholic institutions in Cincinnati in which a number of different orders are represented. Sister Victoria, Superior of the Good Samaritan Hospital, a member of the Local Committee on Arrangements, has kindly consented to assist in making arrangements for Sisters attending from the different parts of the country. Sisters planning to attend should communicate with Sister Victoria, direct.

Distribution of Gauze to the Hospitals for the American Red Cross

STATEMENT BY DR. JOHN A. HORNSBY, SPECIAL SECRETARY OF THE ASSOCIATION.

The American Red Cross has extended the time in which civil hospitals are to apply for participation in the bleached gauze distribution which was outlined in this bulletin two months ago and in accord with which a letter was sent out from the American Hospital Association notifying them exactly what was wanted.

It was decided by the Red Cross that only the live, active and acute diseases hospitals would be given this gauze and 3,089 hospitals were selected to participate in the distribution. It had been felt that every hospital that got a letter offering, free to it, certain quantities of this gauze, would respond promptly, but out of the 3,089 letters sent out, less than 800 hospitals replied. The distribution is now being made by the Red Cross from its various storehouses in the different parts of the country.

There were 27,000,000 yards available, which the Red Cross offered to the civilian hospitals free of any charge except freight bills. The 800 hospitals represent only a small proportion of the number and there will probably be 20,000,000 yards left. If the active hospitals will promptly send their names and the data given below to the Washington office of the American Hospital Association, 728 Seventeenth Street, they can have their share not only of this 20,000,000 yards but of the next distribution which aggregates 22,000,000 yards more.

This was a most wonderfully generous offer of the American Red Cross, the civilian hospitals have been having a hard time during the war and it was believed that they would accept this Red Cross offer in the spirit in which it was made and that they would do it promptly.

The information needed and which must be supplied is as follows:

1. Name, post office, and shipping address of the hospital.

2. Character of the hospital, whether acute or chronic, special or general, and if special, what specialty.

3. The number of beds and of this the number of free, part-pay, and pay beds.

4. The amount of the deficit of the hospital for last year, if any, and a statement as to whether the hospital is a private hospital for profit or "not for profit."

5. How is the hospital supported, whether by endowment, subscriptions, or entirely out of earnings.

6. The amount of bleached gauze that the hospital used during the past twelve months.

The Red Cross requires replies to these questions as a basis for its distribution. Please be as prompt as is possible in furnishing the information if you want some of this gauze.

Woman in the Work of Maternal Aid

M. Flamini, who has had wide experience in children's hospitals, children's dispensaries, and maternal institutions, holds that woman, with her motherly instinct, her sympathy, and her experience, should be strongly represented on all mangaging boards of the various institutions, for pregnant and nursing women and for the protection of babyhood. The city of Rome has at present more than forty of these institutions, but in very few of them have women anything to say in the management. The author holds that in all the large cities of Italy a central board of maternal aid should be established similar to those established for the prevention of tuberculosis. On such a board the physician would be the directive mind, and the women would furnish the heart and the arm. The institution of domiciliary visits should be connected with this work.

Flamini's article on this subject appears in a recent number of the *Policlinico* of Rome.

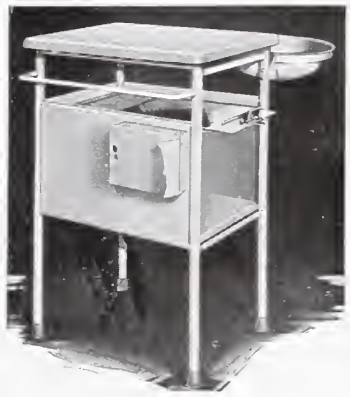
NEW INSTRUMENTS AND EQUIPMENT

VINCENZ MUELLER, Technical Editor.
GEO. W. WALLERICH, Associate Editor.

Please address items of news and inquiries regarding New Instruments and Appliances to the editor of this department, 327 Southeast Avenue, Oak Park, Illinois.

A New Bedside Table

A very important sanitary point often overlooked in hospitals is the danger of infection due to using washbasins promiscuously. The accompanying illustration shows a heavily constructed bedside table with a washbasin attached, designed by Dr. E. R. Crew, superintendent of the Miami Valley Hospital. When not in use this can be turned under the top of the table. The table has



A new bedside table with washbasin attached

also an open shelf for the chart file and an enclosed shelf underneath for the bedside accessories which should not be conspicuously displayed. A sanitary toilet-paper holder, white enameled, is placed on the back of the stand Above it the towel rack is shown. The top of the table is made of porcelain-enameled cast iron.

Improved Type of Lamp for Heat Applications

Application of heat is one of the oldest effective remedies, especially in painful inflammations in any part of the body. Heated stones, hot cloths, and hot water bottles of metal or rubber have long been used for this purpose, but at best this could only touch the surface or penetrate into the tissues to an inconsiderable depth.

It remained for the electric light to secure all the benefits that are possible from heat application, and for some years past various types of therapeutic lamps have been on the market.

The new lamp illustrated here is known as the "Sterling" lamp and its construction differs considerably from those offered heretofore. The globe of the lamp burns in a horizontal position in a cylindrical hood made of aluminum, to which a concentrating tube of polished metal may be attached when it is desired to project the rays into the nose, throat, ears, or other orifices.

The hood has a special ventilating device to temper the

The Sterling lamp

heat and make close and continuous application possible. The lamp is so equipped that it may be attached to any electric light socket. Composition screens of different colors may be fitted to the hood by those who desire the curative properties which are supposed to be inherent to violet, ruby, amber, or green rays.

These lamps are made in four sizes, ranging from 200 to 2,000 candle power.

A Hospital Phone for Deaf Patients

The hospital phone, shown below, is especially valuable in public wards, for it enables doctors, nurses, and visitors to talk freely to deaf patients without disturbing the other people in the ward. It is equipped with a sound regulator which makes it possible to adjust it to all de-

Globe Ear-Phone telephone for the deaf

grees of deafness. The long-life batteries with which it is equipped last from six to eight months without renewing, and the receiver when not in use is suspended on a hook, which automatically shuts off the battery connections.

The instrument is absolutely sanitary, being finished in hard white enamel, with a burnished aluminum receiver and a nickel-plated rheostat.

THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment, and Administration of Hospitals, Sanatoriums, and Allied Institutions, and to Their Medical, Surgical and Nursing Services

Vol. XIII *September, 1919* No. 3

THE CINCINNATI GENERAL HOSPITAL: ITS HISTORY AND PRESENT ASPECT

A Municipally Owned Teaching Hospital, Connected With a Municipal University—The Pride of Cincinnati and Its Citizens—General Plan of the Institution

By C. R. HOLMES, M.D., Major, Medical Corps, U. S. Army, Chairman Hospital Building Commission, and Dean University of Cincinnati College of Medicine, Cincinnati

THE Cincinnati General Hospital today stands as a monument to the foresight and progressiveness of the citizenship of Cincinnati. It is a municipally owned institution; it cost about $4,000,000, consists at the present time of twenty-five buildings, and is located in the center of a plot of about 65 acres of the choicest ground within the corporate limits of Cincinnati. This plot is situated in what is the center of the incorporated city of Cincinnati and is far removed from the basin of the city, thereby being free from the dirt and grime which is the unavoidable condition of a thriving American city.

It is now more than seventeen years since the movement, which grew into the establishment of the General Hospital, was started in Cincinnati. Dire need for adequate hospital facilities to care for the interests of the city's sick and afflicted was the father of this new hospital movement. A municipal hospital was, at that time, one of the institutions maintained in Cincinnati, but the natural growth of the city had rendered useless the effectiveness of this hospital.

The citizens and officials of Cincinnati were a unit in agreeing that Cincinnati was in need of a new hospital, but it was not until February, 1902, that an active step was taken looking towards a new hospital for the city. At this time the hospital trustees and the mayor, Julius Fleischmann, drafted a bill to be presented to the state legislature which would give the city of Cincinnati the authority to issue bonds in the sum of $1,000,000 for the purpose of building a new hospital.

The introduction of this bill was the starting point for agitation both for and against, and in the end the bill failed, but the act at least crystallized sentiment and in the few months following small sums of money were voted for use of those who were making an investigation to determine what should be done to give Cincinnati the

Fig. 1. Bird's-eye view of the Cincinnati General Hospital. Administration building in the foreground.

Fig. 2. Contagious disease department of the Cincinnati General Hospital.

kind of a hospital it deserved. Then came the time when the hospital board was granted the authority to purchase the land suitable for the location of a new hospital. Months and months of work were devoted to the task of securing the proper location and numerous sites in and about the city were examined. At the end of a year a subcommittee reported favorably on the present site and 15 acres were purchased. Later adjoining sites were purchased until when the time came for the building construction to start the tract consisted of 27 acres. Some time after this the city council demonstrated its farsightedness and additional adjoining land was purchased until at the present time the acreage of the hospital site is composed of 65 acres of choice Cincinnati territory.

It was a rare stroke of good luck to secure so large a tract of land, so admirably located for the purpose intended. This was possible only because the tract was made up of hills and hollows and required much grading. Also, this make-up of the land caused it to come to the city at a comparatively cheap price, even when the cost of grading is taken into consideration. Council in purchasing the additional tract after the first 27 acres had been secured took the step that will forever protect the hospital against undesirable surroundings and also provided ample room for expansion when this becomes necessary owing to the general growth of Cincinnati.

Preliminary plans on the buildings were started in 1904, and after a year of work their results were presented to the city officials for approval and were accepted. In the drafting of the plans which guided those who constructed the General Hospital the architects who worked with the building committee of the Hospital Board displayed the keenest interest for the future well-being of Cincinnati. Time and again the plans were changed as some new idea came to the surface relative to the construction of a modern hospital, and in all such cases the architects were guided by what would be for the best interest of Cincinnati rather than what would be the most profitable to themselves.

In May, 1909, the plans for the new hospital were in such an advanced state that money was needed to start the construction and a special election giving the people an opportunity to vote to issue bonds in the sum of $2,500,000 for this purpose carried with a big majority. Later the people of Cincinnati again showed their faith in the project by voting bonds in the sum of $500,000, which money was needed to equip and furnish the group of buildings.

The first group of buildings to be constructed were for persons afflicted with contagious diseases. The facilities at the old hospital were entirely inadequate to give proper treatment to patients with ailments of this nature, and the hospital commission realized the necessity of having this group of buildings completed as soon as possible. As a result these buildings, six in number, were thrown open for the reception of patients in April, 1911. The work on the main buildings was carried along as rapidly as possible and the dedication of the entire group took place February 20, 1915.

In planning the new hospital for Cincinnati the commission entrusted with this task kept in mind: first, that the hospital must be primarily a place for the treatment of the sick; second, that it must be a part of the University of Cincinnati Medical School; third, that it must be a training school for nurses; fourth, that it must include a department for medical research; fifth, that not only must the sick be cured but also their social conditions must be improved so as to leave them less susceptible to disease; and sixth, that an institution containing all of these features must be established at the least possible cost to the people of Cincinnati but at the same time resulting in an institution that would serve the needs of this community for the next hundred years.

The high plateau which is the home of the

General Hospital is now improved with twenty-five buildings, including the medical school which has but recently been completed, and the grounds surrounding the present group of buildings are ample to locate many additional buildings should the need arise.

The General Hospital of today consists of an administration building, receiving ward and outdoor clinic, seven ward buildings, operating pavilion, kitchen and dining hall, men's dormitory, detention ward, power and laundry building, disinfecting station, garage and stable, female dormitory, nurses' home, pathological building and the group for contagious diseases, this group being located on the extreme northwest corner of the hospital site. This group consists of an administration building, nurses' home, detention ward, and three general wards. In this group all types of contagious disease are treated.

In planning this group of buildings one feature which was never lost sight of was that of providing facilities to get from one building to another by means of tunnels, porticoes, and covered ways. As a result of this it is now possible to go about the hospital remaining under cover at all times. The plans for the hospital called, at all times, for a form of construction looking to the proper care of the sick rather than for any ornamental architecture. The exteriors of the buildings are simple and plain but well proportioned, giving them a dignified and pleasing appearance and indicating clearly their purpose.

All modern ideas of building construction were followed in the erection of the General Hospital. They have been made as nearly fire-proof as it is possible to make a building, and, while concrete has been used in a great measure, especially in the construction of the foundations, it has been thoroughly waterproofed and under-drained, so that the basements of the buildings today are absolutely dry.

The general construction scheme is exterior walls of brick faced on the outside with a brown-toned impervious pressed brick and furred on the inside with hollow brick which have been thoroughly water-proofed. The floor and roof construction is of reinforced concrete. All floors are finished with tile and the base is of terrazzo. In but few instances have wood floors been used.

The interior construction has been designed with a view of making the floors and walls as cleanable as possible. All angles are rounded. The plumbing is all of special design following the idea of the most improved hospital construction at the time the General Hospital was built.

Visiting the hospital the first building entered

Fig. 3. The Cincinnati Medical College.

is the administration building. Here are the homes of the superintendent, Dr. A. C. Bachmeyer and his assistants, the main business offices, record rooms and quarters for the staff and interns. At the south end of this building on the ground floor is a large library and reading room and in the north wing is a moderate-sized lecture room fitted up with preparation rooms and platforms. Here the various medical societies of the city hold meetings. The upper floors of this building are used as sleeping quarters for interns and for house-physicians and the suite for the superintendent is also located on the upper floors of the administration building.

In the rear of the administration building is the receiving ward, this being a one-story building with a basement. On the first floor are large waiting rooms for men and women and consultation and examination rooms for physicians. An ambulance porch is located both at the front and the rear of the building. An emergency operating pavilion is also maintained in the rear portion of this building. Clothing vaults for the storage of patient's clothing and valuables and facilities for bathing in-coming patients are also important parts of this building. In the basement one room is set aside for sterilizing clothing.

In the rear and on both sides of this building are the general ward buildings. These wards are divided up for the care of patients suffering with various kinds of ailments.

Just to the rear of the receiving ward is located the operating pavilion. This consists of five operating rooms, two on the first floor and three on the second. In the basement of this building is the drug room and its storerooms and the x-ray department, with photographic rooms and dark rooms. A work room for nurses is also a part of this building. Here nurses may prepare bandages and supplies. The plans also took into consideration the fact that a limited number of students must be cared for in these operating rooms and proper bath and toilet rooms have been installed for their use.

An attempt was made to locate the kitchen and dining hall in the exact center of the group of buildings and this was done. This building is a one-story structure with a basement. In the basement are the various storerooms, all equipped with proper refrigeration. On the first floor is the kitchen, bakery, and dining hall, and adjoining the main kitchen is a special diet kitchen.

The buildings housing the power house and laundry are equipped with the most modern appliances for the performance of the work they are designed to accomplish. This building also serves as the home for the machine shop, carpenter shop, paint shop, mattress shop, and the like, all of which are equipped with proper machinery and supplies to care for the repair and maintenance of the buildings and equipment.

One of the most important buildings in the group is the pathology building, a structure of a basement and five floors. This is given up almost entirely to research work, to teaching, and to the use of the student body connected with the institution. The refrigeration room for the care of bodies is located in the basement and provisions have also been made for the accomodation of undertakers and the coroner as well as a room where autopsies can be performed. A chapel where funeral services can be held is also located in this building.

The nurses' home is located at the extreme northeast corner of the grounds away from the noise of street traffic. It has a basement, four stories, and a roof garden, and is connected by means of covered passage-ways with the administration building and the various ward buildings.

The disposal of the ordinary waste which usually collects about an institution of this kind was amply taken care of in the plans when the

Fig. 4. Bird's eye view of part of the Cincinnati Tuberculosis Sanatorium.

Fig. 5. Ward buildings of the Cincinnati General Hospital, showing the nurses' home in the distance.

hospital was constructed. In every ward kitchen and at convenient spots in all other buildings gas incinerators have been installed where waste material can be immediately destroyed at its source and a large crematory is located in the power house where bulky waste material can be disposed of.

The worth of the General Hospital was demonstrated last winter during the influenza epidemic. When the epidemic was at its height it was found that the General Hospital through its various buildings was able to cope with the situation and if there were any citizens who felt the hospital was too elaborate for Cincinnati this feeling quickly disappeared when the institution was called upon to put down an epidemic, the worst that has visited Cincinnati in many years.

It would not be a broad statement to say that every Cincinnatian is proud of the General Hospital. Ask any man on the street what he thinks of the institution and he will tell you that it is one of the very best in the world, is none too good for a community like Cincinnati and he will add that if the time ever comes for him to guard it to keep it from falling into the hands of selfish interests he will be found in the forefront of the fighting line.

New York Association for Medical Education

The Association for Medical Education organized by physicians and surgeons of New York City, has been incorporated and is about to become active. It is felt that the many advantages offered for special study and research in the institutions of the city should be of greater service to humanity by broadening their field. The corporation consists of three hundred active practitioners and teachers. The officers are: Wendell C. Phillips, M.D., specialist in otology, laryngology, and rhinology, president; George D. Stewart, M.D., professor of surgery, first vice-president; Glentworth R. Butler, M.D., second vice-president; Haven Emerson, M.D., secretary; and Arthur F. Chase, treasurer. The executive secretary is Dr. Henry O. Reik, of Baltimore, recently lieutenant-colonel in the Medical Corps of the U. S. Army, commanding officer of Base Hospital No. 67, A. E. F. He was formerly associate in ophthalmology and otology (1909-12) Johns Hopkins University Medical School. Funds are in hand to maintain a Bureau of Information and Correspondence at the New York Academy of Medicine, 17 West Forty-third Street. Here data concerning all available facilities will be at hand. The work of the association will supplement the Bureau of Clinical Information and Society for the Advancement of Clinical Study. An effort will be made to standardize the instruction of the various medical schools of the city. A central residence for visiting physicians will be maintained where they may be kept in touch with medical matters. The association will cooperate with similar organizations abroad. The association is incorporated under the laws of New York and a board of trustees will manage the business affairs. Twenty-three physicians have accepted election on this board.

MAINTAINING BALANCE IN HOSPITAL ADMINISTRATION

Many Problems to be Considered—Adequate Financial Support, Service, Efficiency, Economy, Smooth Running of Departments Among the Hardest Propositions —Superintendent Must Convince His Own Board First, then Seek the Confidence of the Public

By BARROW B. LYONS, Superintendent of the Delaware Hospital, Wilmington, Delaware

THERE are five especially difficult problems that most hospital administrators are forced to keep in mind: (1) that of securing adequate financial support; (2) that of rendering the highest type of medical and surgical service to their patients; (3) that of furnishing the best possible education to the nurses in their training schools; (4) the very difficult one in these days, of maintaining an organization which functions smoothly in all its parts, visiting interns, nurses, help; and, above all, (5) the problem of economy, which is second nature with most hospital superintendents.

For a hospital superintendent to consider the relative values of these problems without losing his sense of proportion is not an easy matter. The success of the hospital depends upon the balancing of all of these factors, and the wise administrator can not neglect any of them without detriment to the institution, unless, of course, someone looks after part of them for him.

The chief executive of a hospital is not always the superintendent. He may be a member of the board of directors, or one of the medical staff, but whoever possesses the dominating mind in an institution can not escape the consideration of all these problems.

I. SECURING ADEQUATE FINANCIAL SUPPORT

Much efficient work can be done without large sums of money, expensive equipment, or an extensive organization. Intelligence, initiative, and inventive imagination provide ways of doing with little what can only be accomplished by others with large means. In most institutions in which the majority of the staff are not "top-notchers," where training schools inherit the burden of ideas from days when nurses were used as scrub women, and where it is difficult to find efficient interns, there money in considerable amounts becomes requisite to maintain a respectable administration.

Many hospitals have raised their rates to secure needed funds within the last two years. This has been absolutely necessary for their continuance, but in many cases the increase in rates has not offset the additional expense. They have been forced to seek larger donations in the face of the most terrific competition in solicitation for charity which the nation has ever experienced. The result has been in a considerable number of cases, still larger deficits, and in others the closing of parts of the hospitals, or the limiting of free service.

How to meet the present crisis has beome an extremely serious problem. Are those who have always given to the hospitals willing to go down still more deeply into their pockets to contribute the essential support? Many boards of trustees say they are not. Can a wider support on the part of the public in general be sought? In many cases this already has been done until the public has become tired of giving. Are state legislatures to devote greater sums of the public money to the support of hospitals? Unfortunately, as our democracy is organized at the present time, that depends more upon political pull than upon the needs of hospitals.

Probably this problem will gradually solve itself in all three ways. As men and women of wealth recognize the need of greater funds for the care of the sick, more will be given; forced to the extremity, even conservative hospital boards will solicit a larger measure of popular support, and as the public gradually recognizes the need of more efficient hospital service and the extent to which it is suffering because hospitals are not properly provided for, the care of the sick will become more and more a function of the State. Each community and each individual hospital suffers from its own peculiar financial demands. Those hospitals that do not have this problem are fortunate indeed.

II. FURNISHING THE BEST MEDICAL AND SURGICAL SERVICE

The need of funds vitally affects every other factor in hospital administration, the most important of which is furnishing the highest type of medical and surgical service. This depends chiefly upon two things: the selection of doctors and the organization of their work. The selection of men is affected by the adequacy of the support of the hospital, because, as a rule, the most competent men will not accept service in a hospital which is in chronic need of money. Also it is impossible to keep good interns in a hospital which does not provide facilities for their proper training.

Money is more necessary for the organization

of the medical work. For a hospital to produce the most perfect product, which is the greatest benefit to patients, it is necessary that the staff study and analyze their work. This can not be done unless correct case records are kept, which may be analyzed and classified by the interns. A considerable clerical force is necessary to maintain these records properly and to tabulate the data which they contain, so that the facts they show are available in form for the members of the staff to benefit by. This is one of the last purposes for which hospital boards appropriate money, partly because the members consider full and accurate records a "luxury," and partly because the medical profession does not show an inclination to avail itself of such records. If boards would insist that such records be kept and used, as they easily could, if it were not for the unpleasantness of forcing doctors to do anything for which they do not show a natural inclination, hospitals would turn out a better product and their greater value to the community would command better support, in accord with their increased efficiency.

Thanks to the American College of Surgeons, progress is being made in the standardization of medical and surgical service in the hospitals, and the day is fast approaching when the hospital which does not base its appointments and promotions on a definite record of efficiency will no longer obtain adequate public support. Only the first steps have been taken, but the idea is so logical that its final application on a very wide scale seems inevitable.

The task of the hospital administration in bringing this about is no easy one. Medical men and boards of trustees must be convinced of the great need for efficiency records with which to gauge the work of their staffs. Sufficient funds must be found to maintain the necessary clerical work, and the traditions and prejudices of centuries of "medical etiquette" must be destroyed in a large measure before the efficiency idea can become effective. Those who are responsible for the quality of the work done in the hospital must realize that in the long run almost any institution will receive support in direct proportion to the service rendered to the community.

III. FURNISHING THE BEST TRAINING FOR NURSES

The problem of giving the best possible education to the nurses in training is one which is complicated at the present time by several factors. The first great difficulty experienced by many hospitals is that of securing candidates for admission to the training schools. Many young women entered training during the war as a patriotic service. This incentive no longer exists in the same measure. Other lines of activity initially offer much greater emoluments and much easier work. Every one knows that a graduate nurse must work *hard*, and human nature has not changed a bit in securing the easiest way to greatest returns.

Another deterrent preventing the enrollment of student nurses is the publicity given to the fact that in the past nurses in training have been handed a goldbrick proposition by many hospitals which made their nurses do cheap, menial work, giving little education in return. The better grade of hospitals now recognize that they can no longer pull the wool over the eyes of young and unsuspecting females for the females have almost universally become very suspecting.

The best class of girls who now enter the training schools want to know something about the quality of instruction which they will receive: whether a private room will be furnished the student; if a gymnasium and swimming pool are provided; and if more than six or seven dollars a month are allowed for books and uniforms. She is willing to give and sacrifice, but she demands that the board of managers of the hospital in which she enlists her services sacrifice in a like degree.

Many boards of managers have not come around to this point of view as yet, but some hospitals are now faced with the alternatives of providing such things for their nurses or employing graduate nurses, materially reducing their services, or being satisfied with an inferior grade of nurse. To sustain standards means to obtain more funds, and to get money it is essential to maintain, and even improve, their standards. Going backwards means going out of existence; standing still is next to impossible. When this situation is seen in its full importance, hospital trustees will realize that there is but one thing to do, to move forward, and forward they will go.

IV. KEEPING DEPARTMENTS WORKING SMOOTHLY

To keep all departments working smoothly and in harmony is particularly vexatious at this time because of the difficulty of securing efficient help, and of the unwillingness of such as is obtainable to submit to directions and routine. Always, it seems, there is a monkey wrench being thrown into the machinery unless high wages are paid, help fed upon the fat of the land, and housed in absolutely respectable living quarters. Even then they are not always amenable to the rules and regulations which must be rigidly observed in hospitals if the best interest of the patient is to be protected.

An inefficient operating room orderly is a con-

stant source of danger and annoyance. Lazy ward maids who arbitrarily take their Sundays off without leave, whenever they please, are a source of extreme irritation, and kitchen help who can scarcely be forced to wash clean the dishes and silver, are a menace to the entire institution.

More money is again the solution of this problem; but where is the money to come from? Unless the people of the United States wish their hospitals to wither and deteriorate they must furnish the money somehow or other.

V. THE PROBLEM OF ECONOMY

The problem of economizing is one so well understood that it needs no comment. For the hospital administrator to concentrate upon the solution of these most important problems without permitting his mind to be completely absorbed by the many details of routine which come up every day is no easy matter. The hospital administrator who is a leader will manufacture the time to work out these problems for his or her own particular institution. To do so requires unusual energy, clarity of thought and power of concentration. The extent to which he or she is capable of rising to this task will be the true measure of ability, rather than whether or not a quarter of a cent too much has been paid for beans. Let each hospital superintendent test himself or herself in the light of these problems and decide whether he or she is functioning nearer a hundred per cent, or ten per cent.

To keep sight of these problems and relate them to the small, everyday tasks, is to maintain vision. To give its correct value to each decision of the many questions which continually come up requires poise and balance. To solve them requires sagacity of the very highest order. Boards of trustees may measure their superintendent by the degree to which they are succesful in solving them.

The competent hospital administrator will not only be able to convince the members of his or her board of the necessity for the progress here outlined, but will convince the public he or she may work directly with, of this great need. He may work directly or indirectly through others, but will deliver the message so forcefully that it will bear its response in adequate cooperation, moral as well as financial.

MORALE WORK IN THE UNITED STATES ARMY

Importance of Morale in the Efficiency of an Army—Methods Employed in the Morale Branch—Qualifications of the Successful Morale Officer—Application to Civil Hospitals

By JOHN F. BRESNAHAN, M.D., Captain Morale Branch, U. S. Army, Formerly Morale Officer Camp Custer

THE will to work, to fight, to win, makes the efficient soldier. Napolean said, "In war the morale is to the physical as three to one." All great military leaders, among them Caesar, Hannibal, and Cromwell, have recognized the paramount importance of morale; and many of them, in no small measure, have owed their success to their exceptional ability to inspire a high morale in their followers.

In order to develop, in an intelligent and scientific manner, proper morale among the troops, the Morale Branch of the General Staff of the United States Army was organized during the war. The branch staff is formed of experienced officers, psychologists and others interested in the problems of handling large bodies of men. A thorough study is made of the American soldier, not only as to his collective mind and character, but also as to the various methods best suited to aid him in the crystallization of the "will to win." The result of this study is a definite plan for a morale organization throughout the army.

The work of this organization is two-fold, first controlling the positive morale phase (fostering and upbuilding of army morale), and, second, the negative phase (the depression by various means of the morale of the enemy troops).

For our purpose the consideration of the positive phase work done in a typical army cantonment will suffice.

A camp morale officer is selected and attached to the headquarters staff. In each regiment, base hospital and in the separate departments of the camp, such as the school for cooks and bakers, and the "utilities," there is appointed an officer known as the morale agent. As assistant to this agent, there is in each group of men, a soldier, usually a sergeant, known as a morale operative. By means of the operative reporting to the agent daily, and the agent reporting weekly in writing to the camp morale office, and the camp morale officer reporting weekly to his superiors, both in camp and in Washington, a complete check on all conditions affecting the welfare, contentment and

esprit de corps of the men is kept. For example: after all causes of poor morale have as far as possible been removed, such measures as the following were found to be useful:

1. Development of interest, understanding and enthusiasm among officers by general discussion of morale problems; dissemination of information as to the progress of other units; and encouragement of sympathetic relations between company officers and men.

2. Enlistment of the cooperation of non-military organizations in the camps, and direction of their activities into channels conducive to good morale.

3. Development of cooperation, good-fellowship and enthusiasm among the men by various means.

4. Clarification of our war aims and purposes through lectures and private talks with disaffected or misinformed individuals, circulation of literature, posters, slogans, moving pictures, and assistance of camp librarian.

5. Special attention to the recruit, the non-English-speaking soldier, and the negro soldier.

With such a mechanism as above described it is possible to investigate conditions needing remedy, almost at once, and to bring to the attention of the various commanding officers (the ones most interested in the welfare of their men) details which might otherwise pass unnoticed.

It is found that when any morale problem is subjected to analysis, it will almost always be found that the problem has arisen because someone has failed to assume responsibility in some minor detail. The failure of prompt and satisfactory settlement of this detail invariably leads to needless friction and as we all know, friction develops heat.

It is, therefore, the duty of the morale organization to watch for friction and to eliminate it by securing the proper adjustment of working parts of the machine.

It is interesting to note that it is *not* the policy of the morale organization to issue any orders; its duty is to issue suggestions. From this alone, it may be seen how even the appearance of meddlesome interference is avoided and how the wonderful results attained are accomplished in such a quiet, tactful way.

As may be imagined the selection of the proper type of man for morale work is paramount. An officer who is not extremely tactful, yet at the same time quite sure of himself, will fail miserably. Enthusiasm, a belief in his work, and a constructive temperament, are found in every man who has been worth while to this organization.

Demoralized troops are beaten troops, even without battle, and demoralization spreads like contagious disease. The converse is equally true, and a high morale is communicated from man to man as subtly and as subconsciously as any atmosphere, and makes for victory. That which in our American college life is known as "college spirit," that indefinable something that makes a man like to work hard, even at physical labor, for the sake of his Alma Mater, is a variety of high morale. It is this indefinable something which has been developed into what is known as "Army spirit." The duty of the morale organization is to protect and foster this spirit.

In some of our hospitals there exists among the staff, nursing force, and employees, loyalty and a deep sense of pride which more than any other factor makes for efficiency. In the hospitals where unfortunately this factor is absent, there is far more likely to be evidence of friction, lack of teamwork and proneness to petty criticism. The remedy in these cases is a development of good morale. What is needed is a drop of oil here, a little loosening there, and a little tightening up in some other place. It is not an easy matter to avoid clogging with too much oil, or to avoid loosening a binding part of a machine so that it does not rattle. It becomes easy, however, if one has all the facts at hand and with a system of collecting facts regarding the functioning of the different parts of the machine, the diagnosis of the trouble should not be difficult.

The state of the morale of the staff and administration of any institution is clearly reflected among the patients. The will to win in the fight against death, in the recovery from injury or disease, is often found in direct ratio to the morale of the institution. The atmosphere of victory is of untold value to the success of any hospital and there is no good reason why it should not be cultivated instead of allowed to exist or not, according to circumstances.

The morale officer who in a systematic way tactfully investigates and remedies conditions contributing to poor morale either of the hospital family or patients, should have a place in every hospital organization. The amount of good done will be in direct ratio to the amount of kindliness, common sense, and persistency displayed in the work.

The Women's Contributions

Surgical dressings to the number of 300,896,071 and valued at $13,922,292 have been turned out by the volunteer women workers in Red Cross Chapters in the United States during the eighteen months preceding January, 1919. The total value of the work of the 8,000,000 women volunteers is placed at $81,449,997.

METABOLISM CLINIC OF THE ROYAL VICTORIA HOSPITAL, MONTREAL

Growth of Department and Its Organization—Education of Patients—Aid in Diagnosis in Other Departments of the Hospital

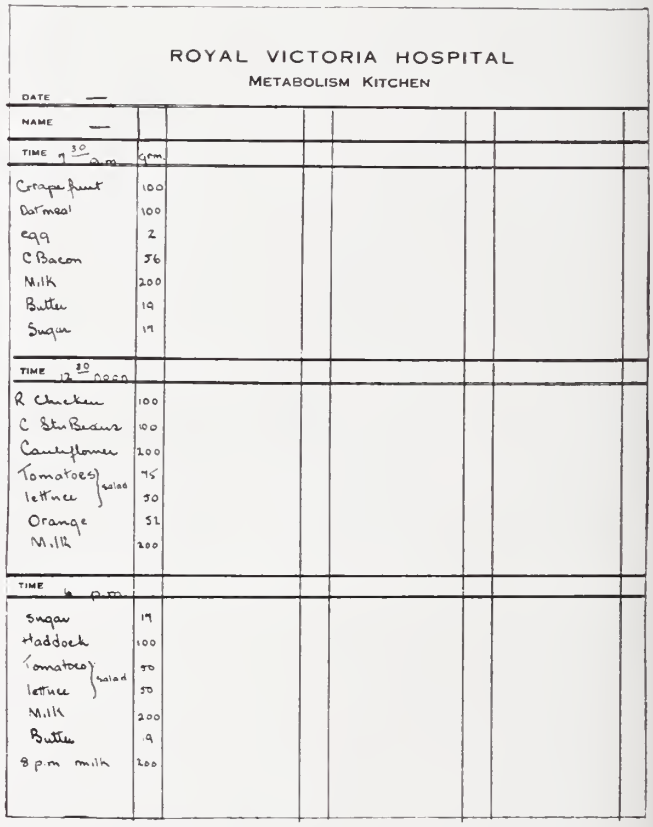
By J. J. WALKER, M.D., in Charge of Metabolism Clinic, and LORETTA O'REILLY, Nurse in Charge, Royal Victoria Hospital, Montreal

ONE might subdivide the continually advancing progress of clinical medicine into periods which correspond closely to some forward step taken in what have come to be known as the

Fig. 1. Metabolism clinic of the Royal Victoria Hospital.

"fundamental sciences." Physiology and biological chemistry have created a new interest in and turned much light upon diseases of metabolism. We have learned much about intermediary metabolism by the application of new methods for the accurate determination of oxygen consumption, carbon dioxide production, the respiratory quotient, and heat production. Pathological conditions in which acidosis is so significant a feature have been greatly clarified by modern methods for estimating the carbon dioxide of alveolar air and the carbon dioxide percentage of plasma. Data obtained by the more recent tests for urea and chlorides in the blood and urine when viewed with the clinical manifestations provide the clinician with a sounder understanding of nephritis and its recognition and treatment.

At our hospital a few years ago, a beginning was made with the higher technical methods in the study of metabolic diseases and nephritis, and, although much good work was accomplished, yet the conditions left much to be desired. The laboratory was far from the wards where specimens were taken and the nurses had not received special training in diabetics, nor been taught to realize the necessity for accuracy of attention to specimens and observation, factors which contribute so much to progress in work of this nature. Nevertheless, in spite of these many difficulties, the long-felt need for a metabolic clinic was satisfied to some extent. The importance attached to the work created a desire for better organization



ROYAL VICTORIA HOSPITAL
METABOLISM KITCHEN

DATE —
NAME —
TIME 9 30 a.m.

	gm.
Grapefruit	100
Oatmeal	100
egg	2
C Bacon	56
Milk	200
Butter	10
Sugar	17

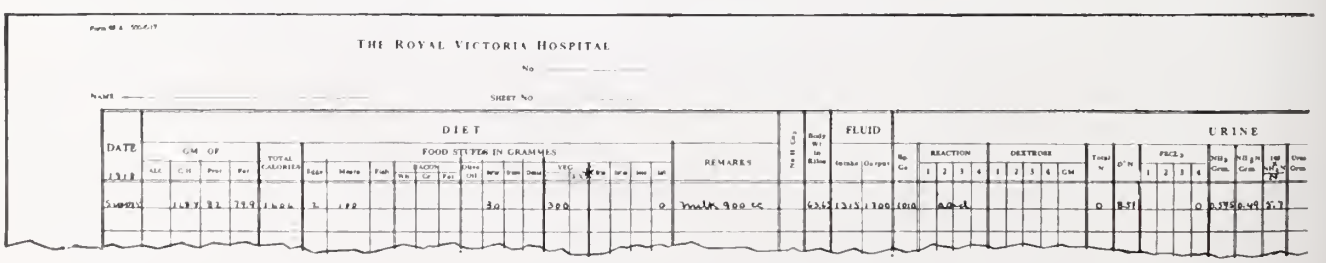
TIME 12 30 noon

R Chicken	100
C Str Beans	100
Cauliflower	200
Tomatoes, lettuce } salad	75, 50
Orange	52
Milk	200

TIME 6 p.m.

Sugar	17
Haddock	100
Tomatoes, lettuce } salad	50, 50
Milk	200
Butter	9
8 p.m. milk	200

Fig. 2. Form showing food values for patient. (Actual size, 9⅜ inches by 11⅞.).



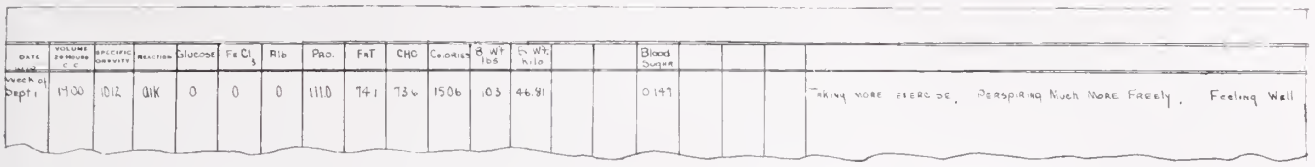
THE ROYAL VICTORIA HOSPITAL

No —— Sheet No ——

Name ——

DATE	DIET: GM OF Alc.	C.H.	Prot.	Fat	TOTAL CALORIES	FOOD STUFFS IN GRAMMES: Sugar	Meats	Fish	Bacon Gr.	Bacon Fat	Fruits Uncl.	Veg.	Milk	Cream	Butter	Eggs	REMARKS	Ur. Vol. c.c.	Body Wt. in Kilos	FLUID: Intake	Output	URINE: No. Cc.	REACTION 1 2 3 4	DEXTROSE 1 2 3 4 GM	Total N	$D^{H}N$	PHOS. 1 2 3 4	Diff. Grm.	N Grm.	Diff. Grm.	Urea Grm.
1918																															
Supper		113.7	32	73.9	1164	3	172					30		300			0	milk 900 cc		63.6	73.5	1300	1010	Acid			0	8.51			0	0.375	6.49	5.7

Fig. 3. Record of patient's diet and all the tests performed for him in the laboratory.

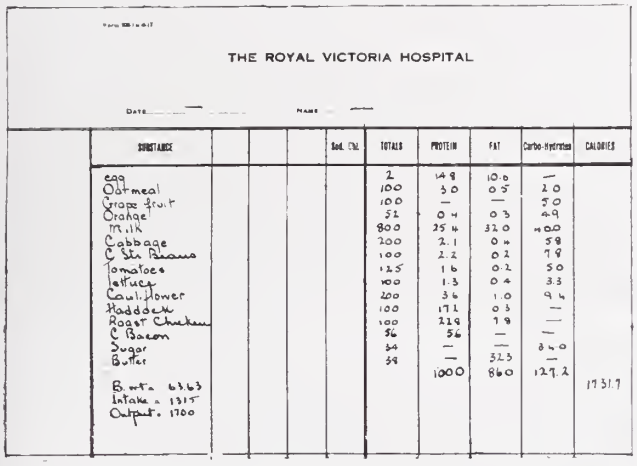


Date	Volume 24 Hours c.c.	Specific Gravity	Reaction	Glucose	Fe Cl$_3$	Rib	Phos.	Fat	CHO	Calories	B. Wt. lbs	B. Wt. kilo			Blood Sugar			
Week of Sept 1	1900	1012	Alk	0	0	0	1110	741	736	1506	103	46.91			0.147			Taking more exercise. Perspiring much more freely. Feeling well

Fig. 4. Record of out-patients who report weekly to the clinic. (Actual size, 9⅜ by 11⅞.)

and equipment, a desire which was finally realized in June, 1917, when one of the pavilions of the hospital situated upon the mountain slope and commanding an ideal view, was remodeled to suit the best conditions for metabolic work.

The ground plan of the two-story building forms an angle in the long arm of which are contained two wards; the separate rooms in each open into a long corridor, and are arranged to accommodate private and public patients. The laboratory, dispensary, and kitchen are contained



THE ROYAL VICTORIA HOSPITAL

Date —— Name ——

Substance	Sol. Ctd.	Totals	Protein	Fat	Carbo-hydrates	Calories
Egg		2	14 8	10.6	—	
Oatmeal		100	5.0	0.5	20	
Grape fruit		100	—	—	5.0	
Orange		52	0.4	0.3	4.9	
Milk		800	25.4	32.0	40.0	
Cabbage		200	2.1	0.4	5.8	
C. Str. Beans		100	2.2	0.2	7.9	
Tomatoes		125	1.6	0.2	5.0	
Lettuce		100	1.3	0.4	3.3	
Caul. flower		200	3.6	1.0	9.4	
Haddock		100	17.1	0.3	—	
Roast Chicken		100	21.9	7.9	—	
C. Bacon		56	5.6	—	—	
Sugar		34	—	—	8.40	
Butter		34	—	32.3	—	
			1000	86.0	129.2	1731.7
Basal 63.63						
Intake = 1315						
Output. 1700						

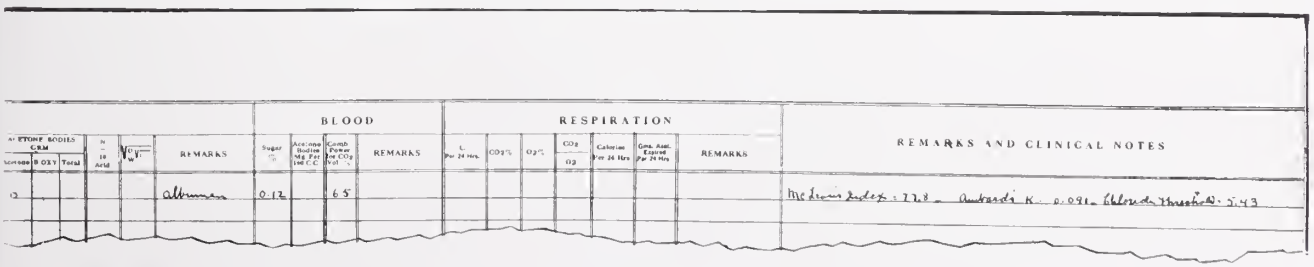
Fig. 5. Form made up from Figure 2, to be filed with case report. (Actual size, 9⅜ inches by 6⅝.)

in the short arm. The laboratory is well equipped with the most modern appliances for carrying on blood, urine, food, and gas analyses. The dispensary is conveniently near the laboratory and has a separate entrance from the outside which greatly facilitates the handling of outdoor patients. The kitchen is equipped with cold storage, gas stoves, scales, and other necessary utensils, all arranged to contribute towards economy of time and labor.

The doctor in charge directs and supervises the whole work of the clinic. The nurse in charge, who is also a trained dietitian, attends to the nursing and dietetics and is assisted by three nurses in training who are in their final year. These latter are chosen from the nursing staff of the hospital because of their aptitude and liking for the work and enter upon their duties at the clinic at different times, so that there is always one thoroughly familiar with the work. In times of stress others are added to the staff temporarily. The internist, who is a graduate in medicine, attends to the case reports and the ward work and assists in the laboratory. In the laboratory the different tests are done by two trained technicians and the internist. Routine tests are done on urine and blood—special tests when indicated. Upon these tests are based the food values for each patient and, to a large extent, the treatment. The food values are written in the order book daily by the head of the department and the dietitian is responsible for the arranging of the diets which are written on the form shown in Figure 2 and posted in the kitchen

Fig. 6. Laboratory of the metabolism clinic.

where each tray is prepared, with the value in grams attached to each article of the diet. This gives the patient a good experience in the quan-



Acetone Bodies C.B.M. Serum	B. O.S.T.	Total	N to 10 Acid	Vol.	Remarks	Blood: Sugar %	Alkaline Iodine Mg. Per 100 C.C.	Comb. Power Vol. CO$_2$ %	Remarks	Respiration: L. Per 24 Hrs.	CO$_2$ %	O$_2$ %	CO$_2$ / O$_2$	Calories Per 24 Hrs.	Gms. Asst. Expired Per 24 Hrs.	Remarks	Remarks and Clinical Notes
					Albumen	0.12		65									Mc Lean Index - 7.28 — Ambard K — 0.091 — Blood Urea N. 5.43

(The asterisk, under the heading of diet, indicates three-times-washed vegetables.)

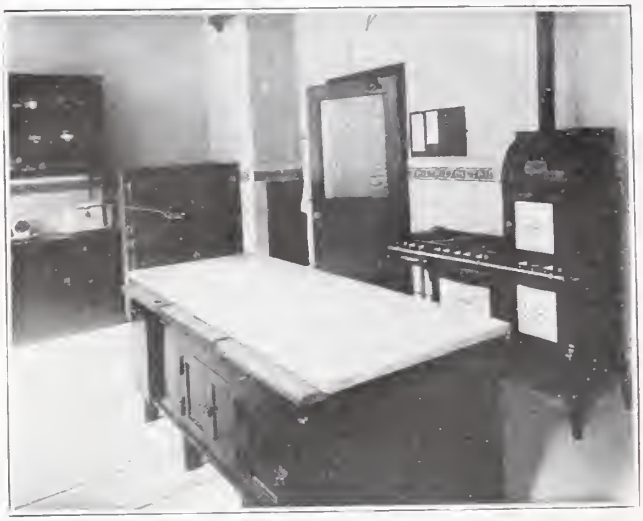


Fig. 7. The kitchen of the clinic.

tity of the different foods required to make up any given amount. The form shown in Figure 5 is made up from the first form and is filed away with the case report, after adding intake, output, and weight. The diet part of the form shown in Figure 3 is copied from the second. All the tests done in the laboratory are then added, so that the third form when completed gives a daily record of the diet of the patient as well as the tests.

During their stay at the clinic, diabetic patients are taught a thorough grasp of food values and how to arrange and prepare their diets. They are also taught routine chemical examination of urine. After discharge they become outdoor patients and report weekly to the clinic. If they reside outside the city, weekly reports are sent in. In this way treatment is followed up and weekly directions as to diets, etc., are given. The form shown in Figure 4 is one of the records kept of such patients.

It has been no small pleasure to us to have realized the growth of interest taken in our clinic by the other departments from which numerous patients are now sent for tests which serve to aid in diagnosis. The greater number of patients treated thus far have been diabetics and nephritics, but, owing to the success attained, it is the intention of the hospital authorities to increase the staff and the scope of the work so as to embrace all diseases in which the chemistry of the body requires special study.

Fig. 8. One of the private rooms.

Italy Still Fighting Tuberculosis

Italy is strenuously continuing the fight against tuberculosis since the declaration of peace, having taken over the work started by the American Red Cross during the conflict. The armies continue to contribute their quota of patients. The Central Sanitary Commission for Anti-Tuberculosis Activity was started late in 1917, and formed the basis of the present organization. A social health bureau also has been formed in Rome, under the Red Cross, from which workers are sent out, functioning through local chapters. Twelve hospitals afford accommodations for 2,500 patients. They are favorably located for climate and cover three types of cases, the curable, those more advanced, and those in the last stages. A hospital for children recently has been opened in Rome, also several nursery-schools for those of tuberculous tendency. War-orphans are given preference in these institutions. The organizations are working with marked success and are conducting an important educational work emphasizing the need for individual cooperation in observing preventive measures. The American Red Cross operated twenty-two military hospitals with 14,326 beds occupied when fighting ceased.

Every morrow has two handles—we take hold of it by the handle of anxiety, or the handle of faith.

Training for Hospital Social Service

The Boston School of Social Work offers during the coming season special courses for the training of workers in social service in hospitals and dispensaries.

"Superintendents and doctors in modern hospitals and dispensaries recommend a social service department as essential to a well-equipped medical institution. The demand for women with special qualifications and training to deal with the problems of family life and community relations, as they occur among people who are physically or mentally ill, is increasing greatly. This demand has been emphasized during the war by the development of the social service departments in the government hospitals and by rapidly opening opportunities in public health work."

A one-year course is open in general social work, with special attention to medical-social service. There is an advanced class entirely devoted to medical social service for those who have had the necessary preliminary experience or training.

The Boston School of Social Work is affiliated with Simmons College, and those completing courses at the school receive certificates, or under certain conditions a degree may be obtained. For circulars giving the details of the courses, the tuition fees, etc., write to Director, School of Social Work, 18 Somerset street, Boston.

THE WALTER REED MILITARY HOSPITAL NEW SWIMMING POOL

Gift of Mrs. Rea, Red Cross Field Director—Patients, Officers and Nurses All to Enjoy its Use—Knights of Columbus Provide Guards and Swimming Instructor

By EARL L. HECK, Formerly on Duty in the Laboratory of the Walter Reed General Hospital, Takoma Park, D. C.

THIS year the hot days of July and August will not bring so much discomfort to the soldier Takoma Park, D. C. Any time during the day the patients of the Walter Reed General Hosuital, men have ample facilities to cool themselves by a plunge into the fine new swimming pool recently constructed. This pool is a gift from Mrs. Henry R. Rea, of Pittsburgh, Pa., who is Field Director of the Department of Military Relief, Potomac Division, American Red Cross.

The pool is 85 feet long and 33 feet wide, and 4 feet deep at one end, sloping to eight feet at the other. The walls are of concrete, about nine

Fig. 1. Soldier patients of the Walter Reed General Hospital, Takoma Park, D. C.

inches thick, reinforced with half-inch steel rods running horizontally. The juncture of the side walls and bottom is sealed with tar. A concrete trough, about one foot from the top, carries off the scum and overflow. Posts at short intervals along the side mark the varying depth.

The physiotherapy department of the hospital surrounds three sides of the pool, making the water supply convenient, the mains supplying that department being used to fill the pool. A hot-water pipe opens into it, making it easy to regulate the temperature, regardless of the atmosphere. Two spring-boards and a diving platform have been installed and a concrete walk surrounds the tank. A drinking fountain soon will be added.

The pool is emptied twice a week, when the walls and bottom are thoroughly scoured. The water is disinfected every night with chloride of lime. A life guard constantly on duty when the pool is used, is furnished by the Knights of Columbus, who also provide a swimming instructor. Another instructor and guard will be thus provided if required. Every precaution is taken to safeguard the health of those using the pool. The military authorities at the hospital have formulated a code of rules that are posted at various points to govern its use, and attendants are stationed about to enforce their observance.

The rules provide that only the patients and personnel of the hospital are to have access to the pool; the time is divided to accommodate all, women as well as men. The patients use it from 9 a. m. to 3 p. m., enlisted men on duty may use it from 5:30 to 8:30 p. m.; nurses and aids and women employed in war work service are allowed to use it from 3:30 to 5:30 p. m., and army officers and those in allied war work service are

Fig. 2. The Rea swimming pool of the Walter Reed General Hospital, Takoma Park, D. C.

privileged during the early hours of the day, from 7 to 9 a. m.

Bathing suits are provided by Mrs. Rea and the rules compel their being washed and disinfected properly at frequent intervals. A permit from the ward surgeon must be shown by patients before being allowed to take a plunge. None with open sores or communicable disease may use the pool at all. The shower bath, using plenty of soap, must prepare all for the plunge. Daily inspection is

made to ensure enforcement of the rules. Other precautionary measures are, life guards on duty at all times who are obliged to be observant, and life buoys and ropes at frequent intervals are ready in case of accident.

The opening exercises of July 5 were presided over by Major A. C. Monahan, chief reconstruction officer, who thanked Mrs. Rea on behalf of the staff and personnel. A poem, composed by Sergeant C. W. Cortland, expressing the gratitude of the Walter Reed patients, was read by Capt. Hughes Means, morale officer.

THE RURAL HOSPITAL FROM A RURAL POINT OF VIEW

Hospital Service Perfectly Practicable for a Rural Community — Specialist Service Available — Staff Should be the Best to be Had — Valuable Training for Nurses — May be Made Community Health Center

By F. E. SAMPSON, M.D., Greater Community Hospital, Creston, Iowa

IF modern hospital service approaches the life-conserving effectiveness claimed for it, and if the human life values of rural communities are worth conserving, there is little occasion for argument as to whether such service is impracticable for rural communities. The question, as I see it, is not, "Can it be achieved?" but, "How shall it be achieved?" We will preface concrete discussion of the subject by a few general observations.

The rural life values of this country are certainly not minor values.

Community welfare is measured by the extent to which the people of a community recognize and cooperate in behalf of their mutual interests.

Child conservation and disease prevention constitute a basis for cooperative effort, regardless of race, creed, or condition. If a community cannot submerge every prejudice in the interest of child welfare, we should by all means establish Christian missions in its churches; lectures on fraternity for its lodges; provide social workers for the woman's clubs; health primers for the doctors and nurses, and hold a psychopathic clinic for its board of education and other public officials.

The density of population in the great cities, creates a higher voltage in the current of social thought and action. The social *potentialities*, however, are no less in rural communities, and if we will provide a plan by which the many organized agencies of the rural communities may be synthesized for community service, these potentialities will become activated, rural social conscience will be illuminated, and efficient rural hospital service will be consummated. Approached through the above-named channels, efficient rural hospital service will naturally evolve.

VARIOUS TYPES OF HOSPITALS

There are two types of hospitals, either one of which is capable of developing highly efficient "repair shop" work. They are well illustrated by two types of induction magnet.

The first is the simpler form in which a bundle of iron rods, with axis parallel, are bound together and placed within a coil of insulated conducting wire. When a constant electrical current is passed through the coil of wire, the bundle of rods develops a strong magnetic pull. This type utilizes only the magnetic field *inside* the primary winding. Such, for example, is the Mayo magnetic core at Rochester, a most remarkable and highly useful mechanism of its kind.

The other type is constructed with a view to utilizing the magnetic field outside of the primary coil, as well as that within. To accomplish this, secondary windings are constructed, which surround the primary coil, and though they are not directly connected with it, the activities of the magnetic core induce the manifestation of high potential forces in the secondary coils. This feature in the rural hospital plan is carried out by uniting all welfare organizations in behalf of Child Welfare, Disease Prevention, Social Service, etc., as a common interest, and making the rural hospital the magnetic core which, incident to the activities of staff, induces social activity in the secondary coils composed of community welfare agencies.

The Greater Community Hospital Association (which includes six counties), centering at Creston, Iowa, is an example of the latter variety of hospitals. In this type of organization, the magnetic core is not the whole thing. In other words, the medical and surgical staff of the hospital constitute the core which, inspired by the magnetic field *inside* the primary coil, carries out the modern approved program of repair shop practice, which means that the service includes coordinated diagnostic work and systematic observation along with the utilizing of every opportunity for educational work. This, naturally sacrifices somewhat the magnetic pull by

which the central magnet attracts patronage from afar. On the other hand, it develops social as well as medical efficiency in, by, and for the community in which it is located. While it strives to do work of standard efficiency in the way of salvaging local human wreckage, it also sustains activity directed to prevention of wrecks.

One highly important function of the rural hospital is teaching.

WHAT AND HOW CAN A RURAL HOSPITAL TEACH?

First it can teach and train doctors, not only those composing its attending staff, but it can reach every respective and responsive practitioner within the horizon of the hospital's influence.

What has the medical service in the way of privileges for doctors? In the Greater Community plan, there "ain't no sich animal" as privileges for any doctor. There is, however, abundance of *opportunity* for the doctor who can and will comply with the rules and regulations of the hospital. Every legally qualified practitioner who belongs to his county medical society is a member of the general staff of the Greater Community Association. The function of the members of this general staff is to cooperate with the public health nurse and social service committees of their own county units. The doctor who is not willing to participate in socializing medicine for service in his own community is a scab on the fair countenance of his profession, and, as the community becomes enlightened, he will eventually be shed. The Southwestern Iowa Medical Association includes the live members from county medical societies of all counties participating in the Greater Community Association activities. Through this Southwestern Iowa Medical Association, the "willing and anxious to grow" members of the county medical societies are brought into association with each other, and the profession, as a whole, is brought into cooperative association with the socially alive people of the greater community. In this way may be brought about coordination of the scientific and social factors indispensable to a realization of full measure benefits derivable from modern medical science.

The following preliminary announcement concerning the Southwestern Iowa Medical Association meeting for October next is of interest concerning the above.

The Southwestern Iowa Medical Asociation will hold its next meeting in the Assembly Room of the Greater Community Hospital at Creston, October 9. This meeting will be especially interesting. Aside from the symposium on obstetrics, the program will be largely devoted to medico-social topics, especially to the development of public health nursing throughout the Greater Community. An address by Miss Katherine Olmsted, western secretary of the National Organization for Public Health Nursing, will be a feature of the afternoon program. The evening program, as usual, will be for the general public. The speaker for the occasion will be announced when the completed program is sent out. The Southwestern Iowa Medical Association and the hospital referred to as the place of its next meeting were born the same year and have been inspired by the same spirit and purpose.

Specialists of nation-wide reputation appear from time to time on its program. Those who present something calculated to help the country doctor do better work are likely to be repeated.

During upwards of twenty years of its existence it has contributed greatly to the development of a high morale among the doctors of Southwestern Iowa.

The following is from the Greater Community Hospital rules for the attending staff:

ELIGIBILITY FOR THE MEDICAL STAFF

To be eligible for appointment on the attending medical staff of the hospital, the candidate must

1. Be a member in good standing of the general medical staff, and hold individual membership in the Greater Community Association.

2. He must give satisfactory evidence of more than ordinary proficiency in some one or more lines of medical practice.

3. He must possess and exercise social sense and the tolerance essential to effective team work.

4. He must render his due share of gratuitous and faithful service in attending patients received as beneficaries under the child welfare and social service plan of the association, and those provided for as dependents of any county whose board of supervisors participate under the association provision for counties. Likewise, services to hospital patients provided for from endowment or other funds devoted to benevolent purposes, must be gratuitously rendered.

5. In collection of pay for service to those who are financially competent, the medical attendant must defer to the hospital claim, and not until the hospital bill is paid in full, is permitted to collect any part of his own claim.

6. While the hospital does not presume to dictate or even suggest what the doctor shall charge for his services, to those who are able to pay, the insistence of any staff member upon collecting a clearly exorbitant amount for services rendered to any patient under treatment in the hospital would constitute cause for his expulsion from the staff.

7. In the diagnosis and treatment of patients, he must show becoming interest and effort, giving his patients every available advantage provided by the hospital equipment and service, including the council of other members of the staff when such would be in order.

8. In every case that receives his care in the hospital, he shall make a true, and in all essentials, a complete record in the form provided by the standard record blanks of the hospital. The original of such record belong to the hospital.

9. As a member of the training school faculty, he must render gratuitous and faithful service in such lines and to such extent as may be arranged by those in authority.

10. Likewise, it shall be his duty to render his due share of gratuitous service in the dispensaries conducted by the child welfare and social service departments.

11. He must attend all meetings of the staff, or present a valid excuse for his absence. He shall in every way within his power strive to render the highest quality of service in his own department, and be ever alert to improve the service as a whole, to create and maintain a high morale among his associates in both the attending and general staff, and promote a like spirit among the hospital nurses and the training school pupils.

We are quite sure that the members of this staff are both receiving and radiating a constructive educational influence.

The rural hospital developed along these lines can and should conduct a nurses' training school.

The hospital with which I have been connected for twenty-five years, has for twenty-three of those years been training nurses. From the beginning it has accentuated the feature of developing resourcefulness, the ability to find ways and means for the application of fundamental principles. The nurse thus trained is able to handle successfully many an urgent situation in which the standardized type of nurse would be helpless in the absence of a complete outfit of standard things. The senior pupil nurse who could not go into the average country home and there find the essential *things*, and prepare said things to efficiently fulfill the essential requirements (aside from surgical instruments) for any ordinary surgical procedure, would not be considered fit for graduation from this training school.

The ability to give a gastric lavage and do it right, and not a few other procedures that some schools might deem invasion of the doctor's domain, are essential for nurses working in rural communities. Every graduating pupil is advised to keep in touch with the progressive thought of her profession, and after working long enough to get "broken in" to the harness of practical work, to take a post-graduate course at some large city institution.

As rural hospitals develop the community health center service, they may well become affiliated with metropolitan hospitals. Such an arrangement would be greatly to the advantage of both. The average graduate nurse, regardless of where she was trained, would be better equipped for efficient service any and everywhere.

Another important line of teaching and training for which the rural hospital described is well qualified, is the teaching and training of the doctors and the general public, not only along lines of social and scientific cooperation, but also concerning *remuneration for medical services*. It is the only solution of the fee-splitting evil about which we have heard considerable noise. (Said noise, by the way, emanates from localities shockingly near where the nasty practice of secret subsidies was born). While we are in hearty accord with the American College of Surgeons' effort to eliminate this evil, we do not believe that the measures thus far proposed are adequate to attain the desired result. They tend to cover rather than correct the wrong.

In the rural community where the people are educated to paying cheerfully a hundredfold more for a surgical operation than they would be willing to pay for service that would prevent the necessity for operation, it will take more than a surgeon's pledge that he will not pay subsidies to make this community inhabitable for the kind of doctor that is most needed, namely the alert, capable man who develops the respect and confidence of the community. He cannot fight the battles without rations. His capable work as a diagnostician, early recognizing surgical indications, and directing his patient to competent surgeons, has a value, as related to conserving the patient's life, often greater than that of the refined technique of the surgeon himself.

Consider an hypothesis touching this subject. A capable country doctor, recognizing a condition calling for prompt surgical intervention, refers the patient to a competent surgeon. The surgeon relieves the patient of his, we will say, infected gall-bladder, and a check for perhaps five hundred dollars, sends him home saturated with admiration for the big surgeon and the big hospital. Sooner or later, the grateful patient saunters into the home doctor's office, expressing the belief that he had better pay for that examination, hands the doctor a ten-dollar bill, and assumes the attitude of a person waiting for the change. Across the street is a bone-head doctor who buys ready made medicine and delivers his surgical cases to the highest bidder. He would have promptly received a draft for his commission on such a case of perhaps 20 per cent.

For surgeons to desert the field of troubles which they themselves planted, and take refuge in the temple of ethical righteousness, leaving the decent doctors to fight it out against the above described type of incumbent, is playing into the hands of the very forces they seek to discourage. The decent doctor, the capable, conscientious man so sorely needed in these rural communities cannot make a living against the established order of things, and desertions of those who trained him and sent him forth to make bricks without straw. Perhaps he goes back to the already crowded city that does not need him, and there fights the drove for a place at the big trough. Incident to which long and strenuous strife he may be driven to practices no less unbecoming, if not identical with the one you seek to discourage. Rules and regulations, such as have been promulgated, are more

likely to conceal than to correct the fault. The real solution of the problem lies in eduation of the community, which can be accomplished only through correlation of the profession and the public.

It was our pleasure not long since to see a letter in which a rural surgeon had done a bit of educating in the line above suggested. The patient was an elderly woman on whom he had been called to operate for strangulated umbilical hernia. The country doctor had not squandered the woman's chances for recovery by protracted taxis. Along with the draft for the amount of the surgeon's bill a member of the patient's family had sent a note expressing gratitude "for the skill that had saved their mother's life."

In reply the surgeon thanked them for the expression of appreciation, remarking that such constituted a very large measure of the compensation for a surgeon's efforts, but in this instance the service that had most to do with the happy outcome was that of their own family doctor, but for whose prompt recognition of the condition and his refusal to compromise with the family's wishes (as against his own judgment) no surgeon could have saved their mother's life.

The surgeon here quoted has for many years been striving to develop efficient medical and surgical work in the rural region where he resides. While he does not hesitate to include a reasonable fee for the physician who calls him, or who accompanies the patient, such charge is open and above board. The incident above noted is characteristic of his attitude and a sample of the teaching that is worthy of emulation.

If our "heavy artillery," the big surgeons of the great cities, would take a little pains to commend good work in diagnosis, and good conduct in referring surgical patients, impressing the beneficiary of such service, with the fact that it was worth perfectly good money, it would help wonderfully to keep capable medical men in rural communities.

In a recent catalog from one of our great medical schools, we counted 250 doctors listed as the members of the teaching faculty—a number of doctors considerably over one-third the total number of students matriculated. Most of those faculty men are comparatively young, and must be considered capable. The majority of them are hanging on to the teat of hope that yields an occasional drop of prospect for promotion. The whole thing is a picture of wicked waste of human capital. Development of rural hospital service would utilize much of this miserably wasted material. It would balance up the national circulation, bring needed talent to the capillaries of the nation's musculature, and relieve the congestion that if not corrected, must result in a nation with a big liver, a lot of gall and guts, with atrophied underpinnings, and bungling intrained fingers.

All very fine you say on paper, quite a dream, etc., but how is the rural community to go about to get even a start on building this paved highway from Reubenville to Utopia? To go into details would be to write quite a book, and the editor of this magazine merely asked for an article. As a general working proposition, I would say to the community that aspires to developing itself, get a community organization that aims at coordinating and synthesizing existing welfare organizations, then develop public health nursing; get your community forces into cooperation on a growing plan that is sufficiently rigid to stand up and sufficiently flexible to meet opportunities; get in touch with the workers on similar lines in other communities; invite national, state and other scientific and social agencies to come into your territory and help your community *to help itself*. The Red Cross, The United States Public Health Service, the National Organization for Public Health Nursing, the various foundations, etc., can do highly valuable service, and without the least danger of overlapping. Another advantage in having the cooperation of such forces is that it sustains that all important organic relation of your community with the larger thought which unifies the many parts that go to make up a great nation.

There are some who are entitled to speak with authority on hospital topics who express skepticism as to the practicability of developing efficient rural hospital service. To such we say come over to Creston, bring your skepticism and your knitting with you, and visit the Greater Community Hospital. The formal call won't do. A running consultation with one's wrist watch to forestall the possibility of missing the first train out, is not conducive to absorption of antidotes for skepticism. Come and loaf here for a while. Talk with the country doctors that come in. Ask them how the work of the nurses trained and graduated here compares with that of nurses trained in your metropolitan schools. Ask them how they manage to transport their very sick patients over country roads. Go and watch some of them examining a patient, look over the history taken, the records kept. Not that our service is perfect, not that the definition above given of a rural hospital is completely exemplified, but it is well advanced on that line. Having grown to its present position against many difficulties that have been turned to forces of promotion, the ultimate attainment of the essentials above set forth is reasonably assured.

THE NEW YORK DIAGNOSTIC CLINIC AND ITS NEW BUILDING

An Interesting Development of the Growing Tendency Toward Group Diagnosis—Accurate Diagnoses Furnished People of Moderate Means for Fees Within Their Reach

By J. J. WEBER, Eastern Editorial Representative The Modern Hospital

GROUP diagnosis, a growing tendency in modern medicine, finds concrete embodiment in the New York Diagnostic Clinic which was completed May 15, 1919, and received its first patient June 20. This clinic was organized by the New York Diagnostic Society, a group of four hundred physicians and surgeons whose practice is largely among people of moderate means. Its president is Dr. M. J. Mandelbaum. The aim is to further opportunities and facilities for diagnosis in New York City.

The clinic gives the practitioner among people of moderate means, who has neither the time nor facilities for thorough-going diagnostic work, a place where, for a moderate fee, an accurate diagnosis can be established through the skillful use of the latest diagnostic methods and apparatus. For this purpose the clinic is divided into nineteen departments, or separate clinics, corresponding to the principal departments of modern medicine. These are adequately equipped with essential diagnostic devices and instruments.

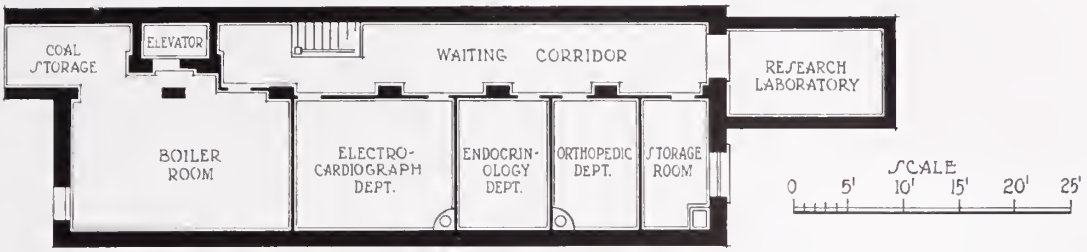
Fig. 1. Hippocrates—one of the fifteen portrait plaques adorning the walls of the reception room of the New York Diagnostic Clinic building.

When a physician, faced by a difficult case, wishes a diagnosis made, he arranges an appointment by telephone or letter, checks on a diagnostic requisition chart the departments in which he desires to have the patient examined as well as the laboratory tests he wishes made, and sends or brings the patient to the clinic. The examinations and tests are made, a diagnosis established and a report sent to the physician for use as a basis of future treatment. At no time does the patient pass from the control of the referring physician.

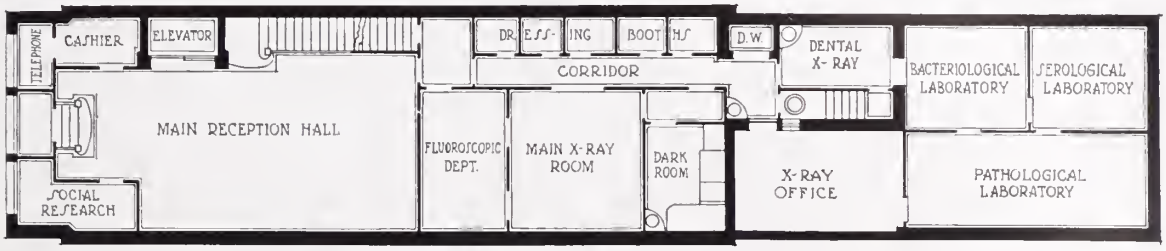
Fig. 2. Main reception hall of the New York Diagnostic Clinic building.

For the services of the diagnostic clinic the patient pays a fee, for it is the intention of the founders of the institution to make it self-supporting. Fees are based on earning capacity, the minimum charge being just enough to cover the cost of the examinations. Although later experience may lead to a revision of the present sched-

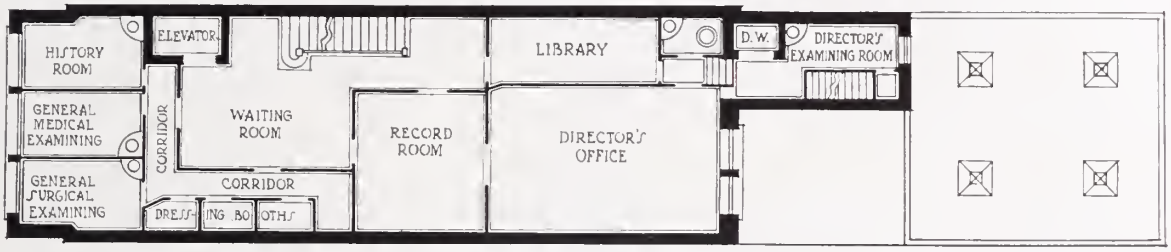
Fig. 3. Pathological laboratory of the New York Diagnostic Clinic building.



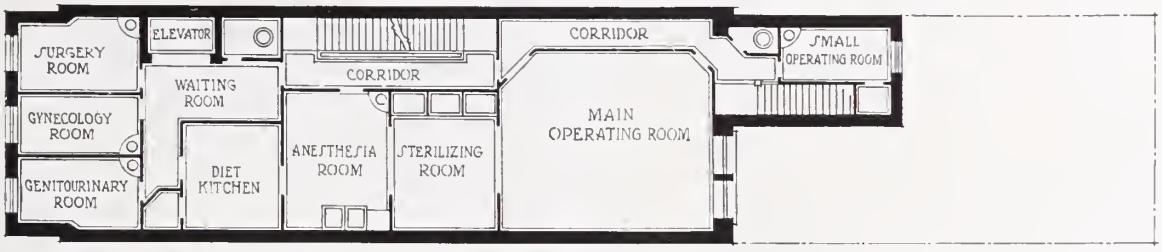
CELLAR PLAN



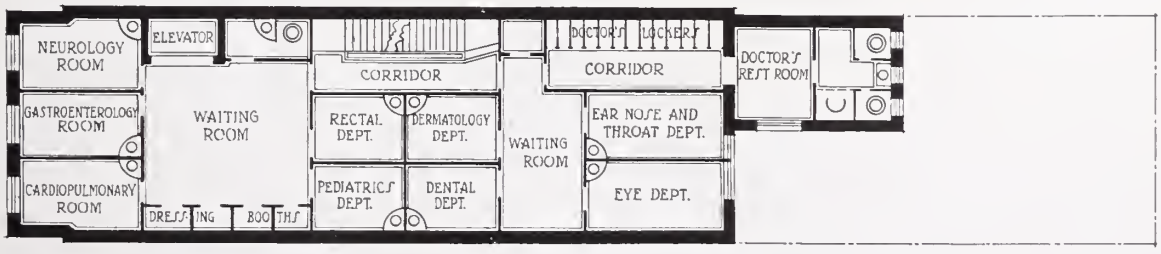
FIRST FLOOR PLAN



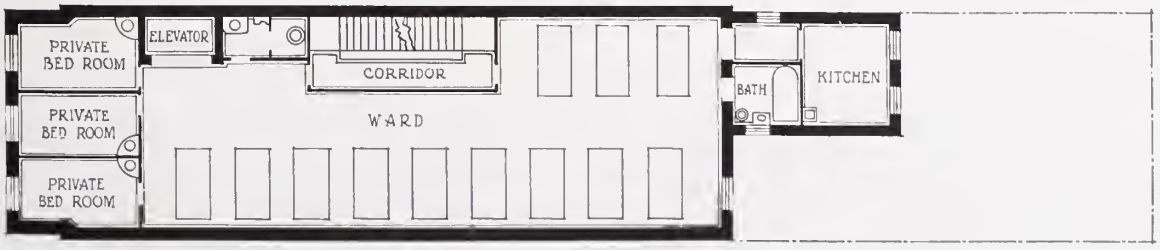
SECOND FLOOR PLAN



THIRD FLOOR PLAN



FOURTH FLOOR PLAN



FIFTH FLOOR PLAN

Fig. 4. Floor plans of the New York Diagnostic Clinic Building.

ule either upward or downward, the examinations ordinarily required to establish a diagnosis can be given at a cost ranging from $5 to $20. The latter charge covers a history of the case taken by an experienced anamnestiologist, a general medical and surgical examination, examinations of the eye, ear, nose and throat, the chest and heart, including fluoroscopy of the heart and lungs, examinations of the urine, feces and blood, including a Wassermann test; and, when called for, rectal, orthopedic, genito-urinary, gynecological and neurological examinations.

Complicated cases involving the use of such instruments of diagnostic refinement as the cystoscope, the urethrascope and the electrocardiograph, as well as prolonged and recurrent chemical tests such as, for example, the carbohydrate functional tests, or the tests for cholesterin, and the uric acid group, may cost $50. Higher than this, however, the charges do not at present go and it is expected that when the clinic is fully established the maximum fee will be somewhat less than this. One factor, of course, which keeps the cost of the examinations relatively low is the unpaid services of the chief attending physicians, who contribute their time and skill much as they do to hospitals.

Pending more definite knowledge of the demand upon the different clinics, the medical staff organization provides for the services of one chief and two assistants on a four or six months' service in each of the nineteen departments. Physicians receive final appointment only after the expiration of a year's satisfactory service.

The building itself is a five-story, brick structure, at 125 West Seventy-second street. The ground floor, except for the main reception hall, is devoted to the clinic's various laboratories. As the patient enters the building he finds himself in the main reception hall, an attractive room 18 feet wide by 34 feet long. The walls (and this is true of the rest of the building) are finished in a soft old ivory color. The trim is Tennessee marble and the floor a bordered white tile. Fifteen portrait plaques, modeled by Mr. Ben Harney, represent Æsculapius, Hippocrates, Galen, Paracelsus, Servetus, Vesalius, Paré, Harvey, Auenbrugger, Jenner, Hunter, Holmes, Lister, Simpson and Laënnec, by-gone leaders in the field of medicine. The caduceus decorates the walls beneath each plaque, lending a tone of dignity and tradition to the room.

The staircase leading off from the west side of the hall is a pure colonial type, the replica of a staircase in a New England home. Between this staircase and the cashier's booth is an elevator which runs to the roof.

To the right of the vestibule is a small enclosure called the social research booth, where the patient or visitor goes for information, and where inquiry is made regarding the patient's income as the basis of the fee he will be asked to pay. To the left of the vestibule is the cashier's booth and the telephone switchboard.

The door in the rear of the reception hall opens into a corridor which gives access to the laboratories and x-ray department of the clinic. There is a serological as well as a pathological and bacteriological laboratory; and, in addition to the main x-ray rooms there is a small one devoted exclusively to dental x-ray work. All of these rooms are thoroughly equipped with approved apparatus and appliances. Five dressing rooms suitably furnished open on the corridor.

The second floor contains the medical director's office and examining room, a small library, a record room, which also serves as the office of the director's secretary, a waiting room, a history room and general medical and surgical examining rooms. A corridor flanks two sides of the waiting room and connects four dressing booths with the history and examining rooms. Limitation of space prohibited the adoption of this desirable feature of construction on the third and fourth floors. The examining rooms throughout the building have hot and cold water. They are also furnished with small desks, chairs and telephones, and with technical apparatus suited to the particular functions of the respective rooms.

The third floor is essentially the surgical floor. Here are gathered the main and auxiliary operating suites, as well as surgery, gynecology and genito-urinary rooms. These three rooms occupy the front, or southern end, of the building. Pending the erection of a kitchen on the fifth floor, one of the rooms on this floor is used as a small diet kitchen for the preparation of liquid diets for the twenty-four-hour patients.

Medical clinics principally occupy the fourth floor. The rooms facing the front of the building are devoted to neurology, gastroenterology and cardiopulmonary diseases. The four rooms in the center of the floor are devoted to dermatology, pediatrics, dental examination and rectal diseases. Examinations of the eye, ear, nose and throat take place in the two rear rooms. The rooms on this floor are served by two waiting rooms with a connecting corridor. To the west of the ear, nose and throat examining room runs another corridor leading to the doctors' lockers, lounging room, toilets and shower.

With the exception of the three private rooms at the front of the building, the entire fifth floor comprises a twelve-bed ward for twenty-four or

forty-eight-hour cases, where prolonged observation or recurrent tests are required. A central skylight floods this ward with an abundance of daylight.

The basement floor contains the boiler and storage rooms, as well as those devoted to a research laboratory, orthopedics, endocrinology and an electrocardiograph.

The general plan of the various departments that go to make up the clinical ensemble show careful study, and is designed to facilitate the examining of patients who require the attention of several, or a majority, of the clinics, as for example, in a periodical medical examination.

The institution is in fact a composite of the diagnostic facilities to be found in the leading hospitals and dispensaries of the United States and Europe. It is worthy of study and may well serve as an inspiration and model for the establishment of similar clinics elsewhere.

THE TRAINING OF SPECIALISTS TO ADMINISTER ANESTHETICS

Danger of Anesthesia in Inexperienced Hands—The Average Intern More Interested in Surgery—Women Satisfactory in This Work—Desire To Be a Surgeon Disqualification

By J. C. OLIVER, M.D., Cincinnati General Hospital, Cincinnati

ANESTHETICS, like knives, are very dangerous in incompetent hands, but like knives, are essential in the practice of surgery. It seems self-evident that every safeguard should be thrown about the use of agents which are capable of doing so much harm, but at the same time we cannot fail to recognize the fact that under our present imperfect system deaths from *ether* are comparatively few.

In seeking for the ideal we must consider the steps necessary for putting anesthesia upon a scientific basis, and endeavor, if possible, to secure to the patient the minimum of danger from anesthetic agents. It goes without saying that this happy condition of affairs can only be brought about by a more complete study and a more thorough understanding of the physiological action and the correct indications for the use of the various agents used for anesthetic purposes. This naturally presupposes an individual possessed of a thorough knowledge of these points—hence the necessity for a trained anesthetist in every institution where surgical work is done.

Large hospitals, possessed of reasonable funds, will experience no particular difficulty in securing the services of a physician competent to give anesthetics and to instruct interns in the most approved methods of inducing anesthesia, but in the smaller hospitals the condition must be met in a manner quite different. These must solve their problem by selecting some physicians or nurses to make a study of the subject and learn all they can about anesthetics. In some of the smaller towns it has become a custom to select a physician for this purpose who, in addition to administering anesthetics, has a general practice to care for. In this way the fees for administering anesthetics serve to supplement his income and make it worth his while to learn the art of anesthesia. This arrangement has proved very satisfactory in a number of hospitals with which I am acquainted.

A fundamental mistake made by most medical colleges is that the subject of anesthesia receives but scant attention in their curriculums. An essential improvement would be for each senior medical student to have the opportunity, under competent instruction, of administering anesthetics to a number of patients. In this way they would receive some preparation for their duties as interns.

As a rule, almost without exception, interns dislike their anesthetic service, and are not only willing, but glad to escape it. It is seldom indeed that an intern evinces any interest in this part of his hospital service—hence the work is done under protest and with his mind fixed upon the day when he shall escape from its thralldom. Once in a long time one is genuinely interested in anesthesia, but very, very few of them ever take more than a passing interest in the subject.

It would seem therefore that our present method is a very unsatisfactory one, one that will not lead to ideal conditions. If any better method presents itself it should be given a fair, impartial trial. The chief desideratum is to secure the services of an anesthetist who has no desire to become a surgeon, because if anesthesia is made but a stepping-stone to surgery the mind of the individual will be fixed upon his ultimate rather than his present object.

It seems logical to believe that better results will be achieved by the establishment of schools for anesthesia, under the guidance of trained anesthetists, where persons, irrespective of being physicians or medical students, but possessing

sufficient education, may be instructed in the art of administering anesthetic agents. This seems a radical departure from established custom, but the experience obtained in several of our large surgical clinics seems to indicate that such a departure will prove a wise and beneficent change, because it will lead to the development of a class of persons who have made a study of the subject and who will necessarily be interested in the further development of their special line of work.

Young women who have had training as nurses will more naturally take to this field, but one may become a very competent anesthetist without of necessity passing through a nurses' school.

It seems probable to me that the anesthetists of the future will be recruited very largely from among the nurses and that occasionally a peculiarly gifted person, not a nurse, will, of his own initiative, adopt this special line of work for his or her lifework.

If it is possible to secure the services of an individual who has had a medical training there can be no question as to his preeminent fitness for the position, but the trend of events seems to indicate the impossibility of securing a sufficient number for positions as anesthetists. If this be true we must perforce seek in other fields for the persons to develop this specialty.

THE SUPERINTENDENT'S RESPONSIBILITY FOR OBTAINING POST-MORTEMS

Post-Mortem Investigation Always Associated with Hospital Administration — Prejudice Against the Practice Largely Caused by Ignorance — Public Opinion Must be Cultivated in its Favor — Only Experts Allowed to Conduct Post-Mortems — X-Ray Plates Desirable

By RUSH E. CASTELAW, M.D., Superintendent Wesley Hospital, Kansas City, Missouri

POST-MORTEM investigation is not a new procedure and it has always been closely associated with hospital administration. The value of scientific deadhouse work has long been recognized and the result of its development has been the principal factor in overthrowing empirical medicine and placing rational therapy on a sound basis.

Up to the close of the Civil War little was done in America in the way of post-mortem investigation. About this time three men who were destined to become leaders in medicine on the Western continent opened up this department of scientific investigation in New York City. I refer to Dr. Theodore Janeway, Dr. Francis Delafield, and Dr. J. W. Southack. These men led the way in medicine for more than a quarter of a century and their success may be directly traced to their work in the deadroom at Bellevue Hospital.

While the development of post-mortem work in America has been a slow process, we are hardly warranted in taking too gloomy a view of the situation. Some of our hospitals have for years made good records in the line and others are rapidly coming to the front. The latest institution to place its name on the honor roll is the Peter Bent Brigham Hospital of Boston. The last annual report shows 147 autopsies, or 58.5 per cent of the deaths. This is a remarkable record for such a hospital and so far as statistics are available it has been exceeded in only a few instances.

It is much to be regretted that in many of our large hospitals where an abundance of material is available, little or no interest is shown in autopsy work. Few requests are made of the family of the decesed and such cases as do come to necropsy are for some reason of no special interest and of less benefit. Our municipal institutions should show at least 50 per cent of their deaths carefully posted; yet, in majority of them, the best that is done is from 10 to 15 per cent. In European cities the same class of hospitals show from 90 to 95 per cent. Without entering further into a discussion of this phase of the subject I wish to say that the responsibility for this deplorable state of affairs can be laid at the doors of the hospital management and the medical profession.

There always has been a prejudice against post-mortem investigation, and until the public is educated as to the purpose and value of this work the prejudice cannot be eliminated. It has been demonstrated time and again that the American public can be educated and made to understand technical matters. If the hospitals and physicians will place this matter squarely and fairly before them, the "bugaboo" that always has gone with a request for a post-mortem will be a thing of the past. The attitude of the public and authorities must be entirely changed. In all our municipal institutions, when a patient is entered and accepts service, he, or authorized friends, should sign a permit for a post-mortem in event of death. It should be a part of the contract between the individual and municipality. In other institutions a system should be perfected that will insure necropsies on at least 75 per cent of their deaths.

At the Mayo Clinic a request is made in the case of every death. As a result of this interest, coupled with the fact that the friends and relatives feel assured that the autopsy will be properly and scientifically done, they are posting over 95 per cent of the deaths at the clinic. A request for a post-mortem has been routine for years at Johns Hopkins Hospital and the patrons of this institution have come to except it as a matter of course. The lay public and hospital authorities should be taught that if a physician or institution is interested in the advance of scientific medicine a request will be made for autopsy.

A study of Dr. Winternitz's table in the January, 1917, number of THE MODERN HOSPITAL offers much encouragement for post-mortem investigation in this country. The Mayo Clinic increased the number of post-mortems from 81 per cent in 1910, to 95 per cent in 1915. The Presbyterian Hospital of New York City increased the number from 33 per cent in 1910, to 40 per cent in 1915; the University of Pennsylvania Hospital from 14 per cent in 1910, to 20 per cent in 1915. Other institutions show an increase, some, a very few, show a decrease. On the whole, the outlook for more and better post-mortem work in America is good. The foregoing paragraphs have been largely historical and statistical. They have discussed the subject of the value of post-mortems in a general way without dealing directly with the subject of the paper. Now, just what is the hospital superintendent's responsibility for the securing of post-mortems for his institution and how can he best meet it? Of course, he has a definite and well-established duty in this matter and no excuse will justify a lack of interest in a subject so vitally important to the scientific growth and development of both institution and profession.

1. The superintendent should determine who is to make the request for the post-mortem—the hospital pathologist, the resident or visiting physician, the chief office clerk, or the superintendent himself? It is not so much a matter of who makes the request as how it is made. The subject should be approached in a quiet sensible way with as little argument as possible and never a threat. It should be explained to the relatives that a necropsy will determine the exact cause of death, and that this information might be of great value to the other members of the family. If insurance is involved, a post-mortem may eliminate all possibility of a controversy regarding the payment of the policy. That an investigation of this particular case might be of great benefit to humanity and medical science. In some cases one individual might be able to present the matter better, in others, some other hospital attaché might make the request to advantage. Whoever is assigned, the superintendent should keep in close touch and see that nothing is said or done to arouse any suspicion or create a prejudice in the minds of the family of the deceased. The rights and feelings of the family and friends must never be disregarded, yet the subject must be placed before them plainly and firmly, and not as though it were something to be apologized for.

2. The superintendent should make it his business to see that his board is thoroughly informed on the value of post-mortems. The members should be in sympathy with every plan proposed that has for its purpose increasing the interest of the staff, both visiting and resident, in the advance of medicine. He should make it plain to the board that furnishing food, shelter, and so-called skillful attention to the patients neither ends their duty nor meets the demands of modern hospital service. If such were the case there never could be any advance made in medicine and little improvement in hospital service. It might be well to refer the board to three thousand post-mortems held at the Massachusetts General Hospital and reported by Dr. Cabot. He found that only a very small percentage of the cases were carrying a comprehensive diagnosis, and his analysis will furnish much food for thought to a board which is well satisfied with "things as they are." The idea should be kept before board members that autopsies furnish the only means for teaching pathological anatomy and checking up the ante-mortem diagnosis. Convince them by reliable statistics that the hospitals that are doing the most for preventative medicine (the greatest of all departments of medicine) are the ones that are furnishing the largest percentage of post-mortem investigations. If the superintendent can get his board thoroughly interested in this matter he will find it much easier to convince the patrons of the institution that it is their duty to permit the bodies of their friends and relatives to be posted.

3. The superintendent has another responsibility in this matter. He should see that the post-mortem room is comfortable, well lighted, and as thoroughly equipped as the best operating room in the house. He should see that the work is made so interesting and thorough that a post-mortem will be regarded as an event and not an exhibition; and that nothing occurs that might lead a spectator to think there was something about the work that was lightly construed. It should be made to appeal to the student and young physician as a proceeding absolutely necessary to his development; that it provides the only oppor-

tunity he will have to compare his clinical observation with the actual diseased organs, and that it is the only way possible for him to study gross pathology; that the normal variations of the human body and organs can be studied at the post-mortem table. It is the superintendent's duty to see that every post-mortem is a dignified scientific procedure, well conducted.

4. The superintendent should see that x-ray plates; the ante-mortem laboratory findings; the clinical notes of the attending physicians, are given consideration at the time of the post. All specimens should be photographed and filed with other records. This stimulates accuracy and tends to discourage guesswork in examinations and diagnosis. The post-mortem findings should be carefully noted and filed with other reports of special investigation.

5. The superintendent must recognize the fact that only experts should conduct the post-mortem, that mutilation of the body is not only useless but prevents the embalmer from properly preparing it for burial. Burial societies, churches, and fraternal organizations should be informed of the reason for making necropsies and the value they are to science and humanity—a representative should be made welcome to the postroom and any mystery explained in a sensible way. When the public learns that it owes something to science; that necropsies are not held to satisfy idle curiosity; that the body will not be mutilated and privileged information exploited; that post-mortems are held in the interests of humanity, and are a humane procedure—then, and not until then, will the public in general readily consent to a large number of autopsies and the profession and institutions derive the benefit that certainly will result from such investigations. It is the duty of our hospitals and physicians to see that the public is so informed.

HOW CAN TEACHING IN THE HOSPITAL BEST BE ORGANIZED?

Duty of Every Hospital To Teach Medicine—Extensive Team-Work Required—Operations, Post-Mortems, and Lectures Open to the Profession—Staff Should Form Foci for Dissemination of New Methods—Teaching Tends to Accuracy in Detail

By GEORGE DOCK, M.D., Professor of Medicine, Washington University Medical School, St. Louis, Missouri

TEACHING in hospitals can best be organized by securing the proper equipment. Modern medicine requires extensive team-work in so many cases that every hospital, even the small one, should have a staff capable of meeting all the needs of its territory. At least, all the diagnostic manipulations, and all the knowledge of how to use the results of these, must be familiar to the combined staff. This does not mean that the laboratory work, from blood histology to serology, and from albumin tests to problems of purin metabolism, is to be saddled upon even the cleverest and best-trained, but nevertheless inexperienced house officer, as is too often done.

The material equipment must be no less perfect, and while this is easier to acquire than training and team-work, how rarely is it found in a hospital! The reason is clear to all who understand the situation. Within a few years medicine has been given a large number of indispensable diagnostic methods, by which diagnoses—not only of names of disease, but of the anatomic and functional state of organs—can be made with a certainty undreamed of a few years ago. These require skilled technicians and expensive apparatus and reagents.

When we realize that there are still living practitioners who do not use stethoscopes for heart or lung examinations, and who think they can test blood pressure well enough by touch, it is not difficult to understand why authorities object to string galvanometers and prefer heads who depend on the therapeutic test in malaria or syphilis rather than have the plant and staff for accurate microscopic and serologic work. Another relic is seen in a willingness to endorse any and all bills for drugs or wine, but to hesitate at bills for baths, screens, and mechanotherapeutic apparatus. Another essential is to have formal records of all clinical, laboratory and therapeutic work on lines customary in the best hospitals, so that any one concerned can find technical information when necessary, and that the work may be a source of reference and comparison.

All operations should be made in rooms accessible to physicians interested, and this should include post-mortem examinations, which should be just as formal as any other, with protocols, accurate weights and measures and scientific completeness.

The question of teaching in hospitals reminds me that almost all hospitals have long had so-

called training schools for nurses. This has too often been a farce, but must change when hospitals serve as teaching centers of medicine. Every hospital should have room for at least a few learners. It should be able to show physicians living within a few hours' travel the latest diagnostic manipulations, and, if they wish, space where they can practice them. Reading is not enough, especially in the case of new manipulations, in case of end-reactions, colorimeter work and many others. Each hospital should make its own staff quickly secure necessary experience of new methods and so serve as foci for new dissemination. Practice in older methods still in use should of course be equally available.

By working on these lines hospitals will furnish most important teaching in a much-needed field, that of the proper use of hospitals by sick people. Each kind of teaching will enlarge the field of, and make more valuable all the others.

Lecture rooms for conferences and carefully selected and properly arranged working libraries, are of course essential. Regular meetings of the staff, to which the profession should always be welcome, should be held for the discussion of cases, reports on literature and travel, and occasional addresses or reports by outsiders.

All opportunities for teaching should be seized by members of the staff, since that will make them more accurate in all their work, help to keep them fresh and up-to-date, and make their abilities known to their colleagues. Not less important is it for hospitals to furnish lectures to the public on live medical and medico-social problems.

THE ORGANIZATION OF A CHILDREN'S DISPENSARY ON THE BASIS OF APPOINTMENTS FOR PATIENTS*

Developing a Follow-up System That Insures the Return of Patients Whose Return is Important—Plan for Eliciting Salient Facts Necessary in Taking History—A Form for Use by Non-Medical History Takers

By EDWARDS A. PARK, M.D., and Co-Workers, Johns Hopkins University, Baltimore

[Concluded from August issue, page 108]

DISPENSARY doctors rarely discharge their patients, even when practically well, but continue to give them reappointments until finally the patients discharge themselves. The attendance lists of many dispensaries, certainly, contain the names of patients whose return for further treatment is a matter of little or no consequence to themselves or to anyone else. Now, even though it be worth while to examine and treat all patients who return voluntarily for their reappointments, it is not worth while to send for all of them, particularly if visiting is involved. In this very point lies the criticism of the rather cumbersome card-index systems frequently employed in dispensaries for the following up of patients who fail to return, namely that they permit of little or no discrimination between those patients whose return is important and those whose return is not in the least important. If a follow-up system is to be efficient and economical it can not be automatic. Continual supervision and direction are required by some responsible person who knows the respective claims of the patients on the one hand, and the powers at the disposal of the dispensary for their recall on the other, and can constantly adjust one to the other.

The follow-up system employed in our dispensary, which was the natural development of the appointment system, is so simple that perhaps we ought to apologize for even mentioning it as a feature of our work. Our excuse is that, simple though it may be, it is not the system ordinarily employed in dispensaries.

THE SYSTEMATIC INVESTIGATION AND CORRECTION OF THE DIET AS A ROUTINE PRACTICE

The nurses' aids taking the histories were required in all cases to ascertain the diets of children above the age of infancy, no matter what the nature of the illness seemed to be. As will be seen by reference to the appended plan for history-taking, they were expected to inquire: first, what the child was in the habit of eating and drinking at *petit déjeuner*, *déjeuner*, *gouter*, and *souper;* then what he was in the habit of eating and of drinking between meals; and, finally, the total quantity of milk bought for him daily, and, in approximate amounts, the daily quantities of bread, potatoes, beer, cider, and coffee. Moreover, they were instructed to follow in their record the order and arrangement of the corresponding illustrative examples given in the history plan, writing each of the four meals in menu form and placing underneath the data in regard to food and drink taken between meals and the

*Written in Collaboration with Dr. Alma Rothholz, Dr. Ruth Guy, Dr. Rena Crawford, Miss Ethel Damon, Miss Mabel Wilcox, and Miss Ruth Washburn, of the Johns Hopkins University, Baltimore.

approximate amounts of the special articles mentioned.

The reason that it seemed necessary to obtain as a routine measure such detailed and exact information in regard to the diets and dietetic habits of our patients was the discovery, made at the very beginning of our work, that the illness of at least half the children applying to us for medical assistance was caused by unsuitable food, improperly balanced diets, actual lack of food, or bad dietetic habits, upon an exact understanding of which success in the treatment depended. In other words, we were forced by the abnormal social and economic conditions existent in Le Havre as the result of the war to lay great emphasis upon the diet. Having once begun the investigation of the diet as an integral part of the examination to the case, however, and having witnessed through systematically conducted corrections of it in case after case the effect produced not alone upon the health of the patient, but in some instances upon the habits of thought and methods of living of the entire family, we were brought to a new realization of the power which the dispensary possesses of becoming a great educational force in the community on the subject of the feeding of the children.

Toward the end of our work very few children left our dispensary without receiving in written form advice in regard to the diet, based on the exact knowledge of the diet and habits to which they previously had been accustomed.

THE IMPORTANCE OF THE CORRECTION OF THE DIET AS A ROUTINE PRACTICE UNDER NORMAL CONDITIONS

Although the part which the diet plays in the health of the child was made unusually prominent as a result of the war, yet its rôle is almost, if not quite, as important under the normal conditions of peace. Probably in ordinary times half the children who seek medical aid in dispensaries do so as the result of the food which they eat. In few dispensaries, however, is the diet of children above the age of infancy carefully investigated, unless under very unusual circumstances, and in none, so far as we are aware, is it always done as a matter of routine. Yet it is unquestionably necessary to know every detail of the diet, every like and dislike, every habit and idiosyncrasy of the patient, in order to treat a dietetic case successfully. The elicitation of the diet is a tedious and time-consuming process. As we have already pointed out, however, it may be turned over to lay assistants. We are convinced, as a result of our experience, that there is no way in which the dispensary doctor can accomplish so much good to so great a number as by considering and treating every case from the dietetic standpoint.

FOOD DISPENSED BY PRESCRIPTION

Many of the patients who came to our dispensary were unable to purchase drugs or medical supplies. A room close to the dispensary clerk's desk was, therefore, selected to serve as a drugroom and stocked with the few needed medicines and medical supplies. The door of the drugroom opened at the side of the dispensary clerk's desk. While the patients on their way out were standing there to have the date and hour of their reappointments written on their dispensary cards, the nurses' aid was usually able to secure the medicines ordered on the treatment slip and to hand them to the patients. When a prescription was ordered which could not be supplied from the drugroom the patient was sent to a certain pharmacy in Le Havre, where by special arrangement the prescriptions presented by our patients were filled at the expense of the American Red Cross.

As has been pointed out already, at the commencement of our work in Le Havre it became apparent that many of our patients needed food more than anything else, and that some arrangement must be made by which it could be supplied to them. Accordingly, we made this matter the subject of a special report to Colonel Bicknell, then commissioner of the American Red Cross for Belgium, and submitted the proposal that the American Red Cross place at our disposal certain food supplies then in its warehouses in Le Havre. Further, we suggested an arrangement with several stores of Le Havre by which orders for special foods issued by us and presented at the stores by our patients would be honored. Colonel Bicknell immediately acquiesced. He placed in our storeroom considerable quantities of wheat flour, sweetened and unsweetened condensed milk, and cocoa, while two of our nurses effected an arrangement with the stores in question, which put at our command fresh milk, eggs, rice, rice flour, potatoes, fresh vegetables, and meat. After June 15, 1918, when the above arrangement was completed, we were enabled to dispense food on prescription, exactly as we dispensed drugs.[4]

The various questions which continually arose with regard to the issuance of food to our patients, for example, whether the patient really needed the food, and to what extent we ought to furnish it, were usually settled by the following procedures: The nurses' aid taking the history al-

4. We were also able to obtain clothing and bedding for our patients by making application in the case of Belgian children to a Belgian organization known as the "Assistance Temporaire," and, in case of French children, to a committee of French women organized for the purpose.

ways included in it a detailed statement of the child's diet. The doctor examined the child and arrived at a diagnosis; he then wrote out for the mother the diet demanded by the child's condition. If the mother stated that she could not supply the diet ordered, the case was referred to the social service department. If the child was in urgent need of food, as in the case of newly arrived refugee families who were often destitute, the social service department supplied enough food to tide over the acute situation and investigated afterwards. If the case was not urgent, however, the social service department supplied no food until it had conducted a home investigation with a view to determining the resources of the family and its standards of living, and had attempted to make certain that it was not receiving aid, financial or otherwise, from other sources. If on investigation it proved that the family was able to pay for the extra food ordered in the diet, no food was furnished. If it was decided that the family could pay for only a part of the food ordered the remainder was supplied. If, finally, the parents were found to be without resource for the additional expense involved, the entire amount was furnished.

When food was supplied to members of our dispensary clientèle in the manner described above, periodic visits were made at the home by the social service department, and the child was required to report to the dispensary physician at stated intervals.

Plan for History-Taking for the Use of Untrained Assistants*

FAMILY HISTORY

(To be ascertained in all cases.)

Mother:—Age. Is she sick? If sick, what is the matter? Has she had chronic cough, coughing of blood, night sweats, loss of appetite, weakness? If dead, how long ago did she die? What was the cause of death?

Father:—Age. Occupation. Is he sick? If sick, what is the matter? Has he had chronic cough, coughing of blood, night sweats, loss of appetite, weakness? If dead, how long ago did he die? What was the cause of death?

Has the child lived in rooms previously occupied by a person suffering from tuberculosis? Has the child been cared for or been much in contact with a person suffering from tuberculosis?[1]

Example:—1. Mother twenty-five years old, poor health, suffering from tuberculosis (tubercle bacilli found in sputum). Father chauffeur, killed at beginning of war (1914). In perfect health till time of death.

2. Mother not in good health, says she has "heart disease." Father well except for occasional attacks of indigestion. He has had a cough for one year and twice has coughed up blood. No night sweats; appetite good; no fever. Unless in case of father no known exposure to tuberculosis.

Pregnancies:—Number. How many children, dead children, children born dead, miscarriages? Make a list in the order in which the birth of living children occurred (giving first name, age, state of health, mentioning disease if such is present), of dead children (mentioning cause of death, stating age at which death occurred), of stillborn children and of miscarriages (stating at what time after the beginning of pregnancy the miscarriage occurred, and its cause).

Example:—6 pregnancies: 2 living children, 1 dead child, 1 stillbirth, 2 miscarriages.

1. Anna, aged six years, suffering from tuberculosis of spine.
2. Miscarriage at three months, following fall.
3. Miscarriage at third month, cause unknown.
4. William, dead at the age of one month, of malnutrition.
5. Stillbirth.
6. Paul, aged two years, healthy.

PAST HISTORY

Birth:—Was the child born at full term or prematurely? Was the labor easy or difficult? Were instruments used? What was the duration of labor?

Example:—1. Born prematurely, "seven-months baby," labor easy, non-instrumental, duration only a few minutes.

2. Born at term, labor difficult, instrumental, duration thirty-six hours.

Weight at birth:—How much did the baby weigh when he was born? Was the weight accurate?

It is often possible to form an idea by asking such questions as the following: Who weighed the baby? Was the baby really weighed, or was the weight guessed at? On what kind of scales was he weighed? If the birth weight is unknown the weight at two weeks or even at one month often indicates the birth weight, and if accurate, may be of as much value for all practical purposes as the latter. If the birth weight is not known, it may be possible to arrive indirectly at a judgment in regard to the weight by asking: Was the baby large or small? Was he fat or thin? Was he larger or smaller than his brother?

Example:—1. Birth weight—three kilos.

2. Birth weight—four kg. Baby weighed by a neighbor neighbor on inaccurate scales (spring scales).

3. Birth weight unknown. When the baby was two weeks old, he was weighed at a grocery. Weight at two weeks, four kg.

4. Weight at birth unknown, but at the end of one month was four and one-half kg.

5. Birth weight unknown, but baby probably at least average weight, for he is described as "large," "larger than any of his brothers," etc.

Symptoms Pointing to Possibility of Brain Injury or Meningeal Hemorrhage at Birth, etc.—During the first hours or days after birth was the child blue? Was it difficult to make him breathe? Did he breathe badly? Did he have convulsions? Was he unable to nurse, or did he nurse feebly?

Example:—1. Immediately after birth the child was blue and did not breathe well. During the first three days he had ten convulsions. He could not be made to nurse and was fed with a dropper.

Symptoms Pointing to the Possibility of Congenital Syphilis:—During the first two or three months after birth did the baby have snuffles? Was there a chronic nasal discharge? Was the discharge bloody? Was an eruption present? Did the palms and soles become red, shiny, and thickened, and did they peel?

Development:—At what age was the baby able to sit up alone, to stand, to walk, to recognize those around him, to talk? At what age did the first teeth appear?

The normal baby sits up alone at about eighth month, tries to stand at about the tenth month, walks between the twelfth and fourteenth months, recognizes objects and people at about the fifth month, talks at about the four-

*The plan is given exactly as drawn up for use by the nurses' aids. It was made as simple as possible and furnished with illustrative examples. As has been pointed out in the text, it was never intended that the nurses' aids follow the plan for history-taking literally, but study it until its questions had become more or less second nature. It is appreciated that the plan is susceptible of improvement.

1. This paragraph does not properly belong under "family history," but was placed under it for convenience.

teenth month. The first teeth appear between the sixth and tenth months.

If the development of the child is judged to be normal simply state in the history "development normal."

Example:—1. It is not known at what age the baby first sat up, but he first stood at eighteenth month, walked with the aid of a chair at two years, but does not yet talk. He seemed to recognize his mother when he was twelve months old. The first teeth appeared at eight months.

2. Development of child seems to have been normal.

Previous illnesses:—Has the child had the ordinary contagious diseases of childhood: whooping cough, chickenpox, measles (extremely rare before the fifth month), scarlet fever (extremely rare before the ninth month), diphtheria (unusual before the fifth month), mumps (unusual before second year); has he had rheumatic fever or St. Vitus dance (unusual before the fourth year), etc.? Make a list of the diseases in the order of their occurrence, stating age at which each occurred:

Example:—1. The child had whooping cough when he was four months old, and measles at five years. Otherwise never sick until the present illness began.

2. The child has never had any of the ordinary contagious diseases of childhood, but he has had two attacks of dysentery, one at five months and the other at ten months during which he almost died. Pneumonia followed by erysipelas when he was four years old. Otherwise always well.

Symptoms pointing to the possibility of adenoids:—Does the child sleep with his mouth open? Does he snore? Has he ever had earache? Has he ever had running ears?

Example:—1. The child always sleeps with his mouth open at night and snores. He has had three attacks of running ears.

2. No symptoms pointing to presence of adenoids.

FEEDING HISTORY FOR INFANTS*

In order to obtain a good "feeding history," *first* ask all the necessary questions, making notes on a scratch pad; then when the information is complete and the important facts stand out clearly in the mind, begin to write. Write from memory, and in order to preserve the natural sequence in story form.

A "feeding history" must show two things: (1) how the baby was fed, i. e. what food he received (its exact composition), when he received it, and in what quantities, and how often in each twenty-four hours; (2) how the food agreed with the child as judged from the changes in the weight, in the character and number of stools, the appetite, sleep, crying, and by the presence or the absence of vomiting.

A nurses' aid ought to be able to find out exactly how a baby has been fed, provided the mother (or the person responsible for the care of the child) is intelligent. If the mother is unintelligent, or if she seeks to conceal what she has actually done, the aid will experience great difficulty. It may be impossible for anyone to obtain the exact facts. Usually, however, it is possible to elicit the truth by patiently questioning and requestioning, particularly the point at issue in an indirect manner. The mother often finally reveals most astounding facts, usually beginning with a slight admission preliminary to a series of confessions.

Example:—1. "Do you give the baby anything to eat between his regular feeding?" "No." "What do you give him when he cries?" "I give him a taste from his bottle." "Does he often cry?" etc. (History states: Child apparently fed whenever he cries.)

2. "Have you added sugar to the baby's feeding?" "Not since the doctor told me not to." "Don't you have to put in a little sugar in order to make the baby take his bottle?" "Yes, he won't take it if it isn't sweet?" "How much sugar do you have to put in to make him take it?" "He won't take it unless I put in two teaspoonfuls." "Heaping or level teaspoonfuls?" etc. (History states: Child receives two rounded teaspoonfuls of sugar in each feeding.)

3. How often do you give the baby his bottle?" "Every three hours." "When did you give him his first bottle this morning?" "At six o'clock." "His next bottle?" "At eight o'clock because he cried for it." "His next bottle?" "At half past ten, he would not wait until eleven," etc. (History states: Baby fed irregularly whenever he cried.)

In a case in which doubt exists as to whether the mother has confessed to every article of food which she has given the child, it is a good plan to extend the inquiries to a whole series of foods which experience shows mothers frequently give their children, as in the following:

Example:—"Do you give the baby anything to eat in addition to the cow's milk mixture?" "No." "Do you give him tea?" "Never." "Coffee?" "His father gives him coffee?" "Beer?" "His father gives him beer." "Do you give him bread?" "Only when he cries for it." "Do you give him tastes from the table?" "Oh yes, he sits up and eats with the family," etc. (History states: Child in addition to his milk mixture receives coffee, beer, bread, and apparently from time to time the food eaten by the rest of the family.)

To indicate to the doctor how the food agreed with the child is perhaps a more difficult task for the nurses' aid than to ascertain how the child was fed, because a certain amount of medical knowledge and experience is required. It may be helpful to remember that a healthy child gains in weight in the early months from one hundred and twenty to one hundred and eighty grams a week, has a good appetite, sleeps well, cries but little, and has from one to three stools a day. A baby receiving insufficient food, on the other hand, does not gain weight but actually loses, sleeps badly, cries when his feeding is due in anticipation of it, takes his bottle eagerly and to the last drop, and greedily sucks his fingers and other objects. A baby over-fed has a poor or capricious appetite, often leaving a large part of his feeding, and frequently has symptoms of indigestion, such as numerous stools, vomiting, colic, is stationary in weight, or gains rapidly one day and loses the next, cries more than usual, and is likely to be peevish. A baby with indigestion has a poor appetite, is apt to vomit, often has diarrhea, fails to gain weight or loses weight, cries a great deal, sleeps poorly, and looks sick.

Finally, it must be stated that an exact knowledge in regard to the feeding which the baby has received in the periods before he was taken sick, and after he became sick, is of especial importance. Often the early part of the feeding history, i. e. that of the first few weeks or months, has relatively little importance, and may be covered in a few words.

To determine how the baby was fed:—Is the child breast-fed or bottle-fed? For how long was he breast-fed? Was he put to the breast regularly, for example, every two hours, or irregularly, each time that he cried? How many times was he nursed at night? What were the exact feeding hours? Did he nurse well? How long a time did he spend at a nursing? After he had finished nursing did he seem satisfied? Why was breast feeding stopped? Was it stopped suddenly or gradually?

When breast feeding was stopped, what kind of feeding was substituted? Was the weaning from the breast to artificial feeding accomplished suddenly or gradually? Exactly how was it accomplished?

*For children under one or two years who are the subjects of digestive disorders, or who are brought for the regulation of their feedings, the so-called "feeding cases."

When were the artificial feedings begun? What kind of milk was used—cow's milk (boiled or unboiled), condensed milk, sweetened or unsweetened? How much milk, how much water or other diluent, how much sugar or patent food in each feeding? (Determine the exact composition of the mixture). How large a quantity of the mixture was given at each feeding? How many feedings in each twenty-four hours? What were the feeding hours? Was the baby given other food than the milk mixture, for example, bread, *confiture*, potato, cereal, beer, coffee, etc? Was he given tastes from the table; sugar water when he cried? When he cried between his feedings what did he receive? Exactly what was the baby's diet before he was taken sick?

To determine how the feeding agreed with the baby: Was his appetite good or poor? Was the child satisfied? Did he cry when the feeding ended? Did he cry for half an hour or more before the next feeding hour fell due? Did he take his feedings ravenously? Did he always take all of his feeding, or did he leave some in the bottle? Did he have to be coaxed to take his feeding?

Did the baby vomit? Much or little? Immediately after each meal or sometime afterwards? Did the vomiting consist merely in the spitting up from time to time of small quantities of milk, often accompanied by the belching of gas? It may be necessary to know whether the matter vomited was thrown out of the mouth with force (spouting out), or whether it simply flowed from the corner of the mouth, or whether the child opened the mouth widely and made chewing motions in connection with the vomiting.

What was the number of stools in twenty-four hours? (How often was the napkin changed?) Constipated or liquid? Large or small? Did the stools simply consist of green or yellow stains, or did they contain mucus, or white curd-like masses, or blood? Was a great deal of gas passed?

How did the baby sleep? Did he sleep well at night, or did he wake up and cry? Did he sleep well during the day? Did he go to sleep immediately after his feedings as if satisfied, or did he remain awake and cry as if still hungry? Did he wake a half-hour or an hour before feeding time and cry as if hungry?

Did the child cry a great deal? Did he cry only for a moment when his feeding was over, or did he continue to cry for a long time as if hungry? Did he begin to cry half an hour before feeding time as if anxious for his food? Did he draw up his legs when he cried as if he had colic? Did he cry as if in pain? Did he stop crying as soon as he was taken up? Is the baby always taken up when he cries?

Has the child gained or lost weight? Has he been weighed? (Who weighed him? How often? On what kind of scales?) How much weight was the baby gaining or losing before he was taken sick? How much did he weigh at one month, at three months, at six months, one month ago, two weeks ago, etc?

Example:—1. Always breast-fed, for first three months at two-hour intervals during the day and once at night, making in all eight feedings; for the past two months every three hours during the day and not at all at night, making six feedings. Both breasts given at each nursing. Duration of nursing period fifteen minutes. Satisfied. Very rarely spits up small quantities of milk accompanied by belching of gas immediately after feeding. Sleeps well. Two or three yellow stools each day. Present feeding hours 6 a. m., 9 a. m., 12 noon, 3 p. m., 6 p. m., 10 p. m.

2. For one month breast-fed every three hours. During that time the baby thrived, gaining 800 gm. Weight of baby at end of first month 3.68 kg. One or two yellow stools each day. Breast feeding suddenly discontinued because of illness of mother. Baby given sweetened condensed milk mixture. One full teaspoonful of condensed milk in 100 gr. of boiled water offered to the baby each time that he cried. About two weeks after the condensed milk feeding was begun the baby began to vomit and have diarrhea. The vomiting occurred at irregular times, sometimes almost immediately after the feeding had been given, sometimes not for two hours afterwards. The baby seemed to vomit all that he took. Soon after the vomiting began diarrhea developed. The baby had as many as six stools, which were green and contained a great deal of mucus. In three weeks the baby lost 600 gm., so that at the end of seven weeks the baby weighed 3.08 kg. When the baby was seven weeks old the feedings were changed to cow's milk 50 gm., water 50 gm., sweetened with two heaping teaspoonfuls of *farine lactée*, given at two hours' intervals, ten feedings in twenty-four hours. But the baby continued to vomit and have diarrhea and to lose weight. Accordingly, a doctor was called in yesterday who advised that the baby be sent to this dispensary. Yesterday had eight stools containing mucus and some blood, and vomited six times. He seems very weak.

FEEDING HISTORY (OLDER CHILDREN)*

What does the child eat and what does he drink at (1) *Petit déjeuner*, (2) *midi*, (3) *goûter*, (4) *Souper?* What is he given to eat, and what is he given to drink between meals? When he says he is hungry what does he get? What is the total quantity of milk he receives in twenty-four hours? How many slices of bread does he eat daily? Does he eat a large quantity of potato? Does he eat a great deal of *confiture*, chocolate, or fruit? Does he drink beer, *boisson*, or cider,—how much?

In connection with the feeding history of older children it is necessary to inquire in regard to the appetite, whether good or bad, and in regard to the number and character of the bowel movements of each day.

Example:—*Petit déjeuner*, 8 a. m.—One slice of bread and butter, two cups of coffee without milk or sugar.

Midi—Vegetable soup, one slice of bread and butter, mashed potato, four soupspoonfuls, two glasses of beer.

Goûter, 4:30 p. m.—One cup of coffee, one slice of bread and butter, and a small piece of chocolate.

Souper, 7:30 p. m.—Vegetable soup, mashed potato, occasionally a little meat or an egg. One slice of bread and butter, one cup of coffee.

The child takes no milk because the family cannot afford it. Between meals, at 10 a. m., he eats a slice of bread and butter with jam and drinks a cup of coffee.

PRESENT ILLNESS

Why is the child brought to the consultation? What is the matter with him? (Chief complaint.)

(The nurses' aid need not attempt to investigate the present illness of the patient. It will be ascertained by the doctor taking charge of the case.)

"The Nation's Creditors"

But as they stood there chattering,
Out from the station came
A string of cautious motor cars
Packed full of lean brown men—
The halt, the maimed, the blind, the lame,
The wreckage of the wars—
Their faces pinched and full of pain,
Their eyes still dazed with stress and strain—
The Nation's creditors.

—JOHN OXENHAM.

*To be ascertained in the case of all children over two years of age. Not only the kind of food must be listed but the approximate amounts, if possible, must be given.

MANAGEMENT OF CONTAGIOUS DISEASE HOSPITALS*

Proper Construction of Importance But Equipment and Management More So—Loyalty of Staff Should Be Ensured from the Start—Technique Must Be Observed by All—Not Now Deemed Imperative to Segregate Doctors and Nurses—How to Avoid Cross-Infection

By D. L. RICHARDSON, M.D., Superintendent, Providence City Hospital, Providence, R. I.

WHILE the proper construction of a contagious disease hospital is of importance in the control of cross-infection, it does not require the same attention as the hospital equipment and its management. Given a hospital built in every respect along modern lines and let it be under the control of untrained and careless personnel, the results will be disastrous. On the other hand, given even a temporary and poorly arranged building which is provided with sterilizers, plenty of lavatories, and other essential equipment, and conducted by some one who knows infectious diseases and modes of infection, one may expect success. Expensive construction, alone will never stop infection, but intelligent direction and rigid technique will reduce infection to a minimum.

The treatment and the control of contagious disease in the hospital is developing a new specialty which requires first a well-grounded medical and hospital training, supplemented by experience in a truly modern hospital. When a contagious hospital opens its doors to all contagious diseases, and hopes to properly treat and protect the patients, the force of this sentence will be realized.

A contagious hospital of any size should be in charge of a resident physician, who should have the backing of a consulting staff. Most hospitals of this character are municipal and they should be controlled by a board of commissioners (five is a fair number), of which the superintendent of health should be a member *ex officio*, and composed of both members of the city government and of representative citizens. These provisions bring the contagious hospital in close association with the health officer, for their work is inseparable, and helps to remove the hospital administration from politics. When politics enter, hospital efficiency steps out. The board should hold the superintendent responsible for the work of the hospital and give him liberty to carry out all details of the administration. The general policies should be arranged between the board and the superintendent, and the latter should render a detailed report, financial and medical, to the board each month.

The hospital superintendent should carefully select the superintendent of nurses. Much of the success of the control of infections will be due to her. She should have had general training and special experience. She should possess tact and the ability to inspire others, and yet be firm.

In contagious hospitals not associated with a general hospital, the nursing should be done by pupils under graduate head nurses. The pupils can be drawn from general hospitals and the training should be for a period of not less than three, and better four months. It is not easy and is expensive to obtain graduate nurses to carry on all the nursing, and a contagious hospital should take part in completing a nurse's all round education.

LOYALTY OF THE STAFF SHOULD BE ENSURED AT ONCE

In launching a new hospital, it is important for the superintendent to call together all his selected doctors, nurses, and employees, and explain the usual ways of disease transfer and how this may be prevented under hospital conditions. His explanation should make clear the reason for the various regulations and enlist their loyalty from the start, for each one must do his or her work faithfully, or the results will be unfortunate.

After the superintendent of nurses has properly instructed the head nurses, they in turn should take over the instruction of other nurses and ward workers. Subsequently, all new nurses and ward workers should be seen by the superintendent of nurses before going on duty, and she should go over the subject of infection in a brief way and impress upon them the importance of living up to the technique. Not every one will take kindly to this technique, particularly older doctors and nurses, but ask their cooperation and it will not be long before they will be convinced of its success. In the same way, the hospital superintendent should talk to all new interns and imbue them with the spirit of cooperation.

Before entering upon their duties, each one of the personnel should be vaccinated against smallpox. Unfortunately, many of the training schools are lax in this matter, and certificates from the family physician are not always to be relied upon. Within a year, we admitted a nurse from another

*This is the fifth article in a series on "The Care of Infectious Diseases in Hospitals." The first, "The Care of Infectious Diseases in Hospitals," was published in the April (1919) number of The Modern Hospital; "Medical Asepsis in French and English Hospitals," appeared in May; "Aseptic Nursing in American Hospitals," in July; and "Construction of Isolation Hospitals," was published in the August issue.

hospital to die from smallpox. Cultures of the nose and throat, to be examined for diphtheria bacilli should also be taken before going on duty. Typhoid vaccination also is advisable if typhoid fever is one of the diseases to be admitted. Every one who reacts positively to the Schick test should be immunized. A medical history of previous infectious diseases should be obtained from each person before entering upon duty.

The duty of protecting employees and patients does not end here. The officers of the hospital must be forever upon the alert and insist upon employees reporting at once a sore throat, a rash, and any acute symptoms, so that they may be taken off duty promptly, for their own good, as well as the good of the other employees and patients.

Diphtheria carriers or diphtheria convalescents may be allowed to work in the diphtheria ward. Scarlet fever convalescents among employees may be allowed to work in the scarlet fever ward for a time before being put to work in other wards. Careful supervision of personnel is of great importance.

Doctors, nurses, and employees need not be shut up in the hospital as was formerly done. It was a considerable task for a nurse to carry out the necessary disinfecting regulations before going to town. Providing the nurse obeys the hospital technique and is under careful supervision, there is no more reason for her to be ostracized from the community than when she is working in a general hospital. The infected area of a building should be only the rooms occupied by the patients and certain verandas and toilet rooms to which patients are allowed access. The corridor, the kitchen, the linen room, the wash rooms, and some of the toilets are as free from infection as those of any general hospital. For a year or more our graduate nurses have worn the same uniforms (short-sleeved) on duty and off duty and there have been no bad results. This privilege has now been extended to the pupil nurses. This all presupposes that the nurse observes faithfully the ward technique.

It will readily be seen that by keeping the working parts of a ward uninfected, it makes the delivery of supplies, laundry, and all communication with the rest of the hospital a much simpler matter, indeed much the same as in a general hospital.

SPECIAL TERMS IN USE DEFINED

Before proceeding further a few definitions and explanations will be offered:

The term "unit" will fequently be used. This refers to one or several patients who are allowed to mingle with each other and between whom no disinfection takes place. The nurse and doctor pass from one patient to another without precautions. Obviously, the patients, if more than one are in a unit, are suffering from the same disease. As has already been advised, six to eight patients should be the maximum number in any one unit. Theoretically, every patient should be treated in a separate unit, but this is too expensive a process and practically is not necessary.

The terms "contaminated" or "infected" refer to anything, hands, clothing, utensils, etc., which has come in contact with the patient, or anything, floor included, in the infected area. Floor infection is not of very great importance although nothing which has been dropped on the floor should be used on a patient until properly washed or sterilized. This rule should be carried out rigidly. The shoes of nurses and doctors, theoretically, may be infected, but from this possible source little or nothing may be feared if the above regulation about picking things up from the floor is enforced.

Although all wards should be conducted as isolation wards, the term "isolation" is reserved for those wards in which a variety of diseases are treated. The wards which are used for scarlet fever or diphtheria alone may be termed straight, or main, wards. In small hospitals all wards should be isolation wards, but in larger communities where there are enough scarlet fever or diphtheria patients, or any other disease, to fill a fair sized ward, it is far better to devote wards to these diseases. It concentrates patients with the same kind of disease, and better results from a medical standpoint may be obtained in treatment.

HOW TO AVOID CROSS-INFECTIONS

In isolation wards, the rooms should accommodate from one to three patients and they may stay in the same room throughout their hospital residence. But in a ward for scarlet fever there will be several in the acute stage of the disease and several in the convalescent stage. They don't mix easily from an administrative standpoint; therefore the convalescents should be concentrated in the larger or convalescent rooms, while the acute cases are detained in the smaller rooms.

When a ward is so arranged that 50 per cent of the patients may be in the acute rooms and 50 per cent in the convalescent rooms, it is possible to keep all new patients in the acute rooms for a period of one week before transfer to the convalescent rooms. This first period is called the period of detention, and the second period, the period of convalescence.

This method also helps meet the important problem of avoiding cross-infections. No matter how careful or skilled an admitting man may be, there are always cases coming in on which a positive diagnosis can not be made, or a wrong diagnosis may be made. While it is always important to obtain at the house a history of exposure to a second infectious disease, such a history when negative is not to be relied upon and any child may be admitted while in the incubation period of some other disease. Potentially, every new arrival is a menace to the other patients in the ward.

Fig. 1. Ambulance and attendant.

Fig. 2. House officer in his short-sleeved jacket.

This period of detention of one week affords time for further observation, obtaining cultures, and vaginal smears, and while it is not long enough to bar out altogether diseases like chicken-pox, mumps, etc., in which the incubation period is long, many are likely to be in the latter part of this incubation period at the time of entrance and may develop the second disease while in detention. During this time also, it not infrequently happens that from the parents or other sources, exposure to secondary infectious diseases may be learned and proper precautions be taken.

Another precaution may also be taken. If, in a case sent to the scarlet fever ward admitting room when the diagnosis is doubtful, the child is suffering from more than one infectious disease, or has a history of exposure to a secondary disease, he may be admitted to the acute room. If the patient is "barriered" in a single unit, he may be admitted either to a room for one patient, or to one having as many as three patients.

It is obvious that in such a straight ward there will be three classes of patients, detention, convalescent, and barriered. Now there must be some way to designate the various units so that the nurses will know what patients belong to the same unit. This is of much importance. The method should be simple so that the nurse may know at a glance how to carry out the technique, otherwise there will be confusion, and this is fatal to success. The simplest method is to have three kinds of cards about 6 by 4 inches on which is printed "Detention," and "Barriered," and "Convalescent." These cards may be put in a card holder on the bed, on the door, or door-casing.

Where there is only one patient in a room, or several in a room, but in the same unit, the card is placed on the door, or frame, facing the corridor. In a three-bedded room for instance, one patient may be in detention and such a card is hung on the bed, another may be barriered with the proper card on the bed, while a third might be convalescent and the bed properly marked in the same way. In such a case, each one is a separate unit, and each patient has his bed, bedside table, chair, shelf for therometer, etc., and two hooks for gowns, one for the nurse and one for the doctor. In case there are two in such a room in the same unit, say, detention, the card "detention" is put on the door, while the third may be barriered by having a "barriered" card hung on the bed.

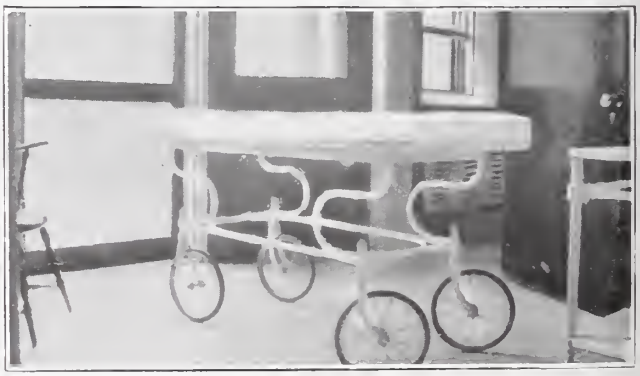


Fig. 3. Admitting room. Note but three articles of furniture.

The infected area begins with the door into the room. The corridor side of the door, including the knob, is considered uninfected, while the other side and knob is infected. This matter is dwelt upon at some length because the whole success of aseptic nursing depends on clearly defined limits between infected and non-infected areas, and definite demarkations between units.

It must not be believed that everything in the infected area or unit is infectious, but the need of such an assumption is necessary in carrying out a uniform technique.

CARE IN ADMITTING PATIENTS

The careful admission of patients is of great importance. Infectious diseases are not introduced into the hospital by visitors and things brought in to patients but by the patients themselves. Either a wrong diagnosis has been made, or the patient is a carrier, or in the incubation period of some secondary disease. It should be the aim of the admitting officer to admit patients by disease and not by symptoms. For instance, a child might be admitted for bronchopneumonia which might be the beginning, or their only sign, of measles. The careful man will admit to detention in any ward only those frankly positive cases which belong in that ward. If the case is at all doubtful or is suspected of having a double infection, or exposed to a second disease, he should be sent to an isolation ward or barriered in a separate unit until the diagnosis has been cleared up. Any man who thinks he can make a positive diagnosis either is inexperienced or a bombast.

Admitting patients to an isolation ward, each room of which contains one bed, is simple. The patient is sent directly to some room and may be kept there until his discharge. There is no need of cards. In case a room in the isolation ward contains more than one bed, the barriered cards

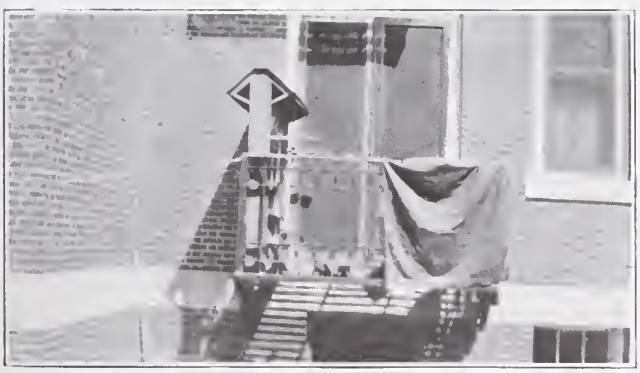


Fig. 4. An isolation hospital balcony for airing and sunning.

may be placed on the beds to divide the patients into separate units.

The careful admission of patients is only one step in protecting the hospital from outbreaks of infectious disease. They must be under most careful observation. The head nurse, upon whom the success of the ward administration largely rests, should report at once unusual high temperature, a rash or a sore throat, meantime keeping the patient in a separate unit until the medical officer has seen him. Unless he can explain these symptoms as belonging to non-infectious condition, such a patient should be barriered until a diagnosis has been made.

It is always important to take out of convalescent ward patients with marked nasal discharges, sore throats, tonsillitis of convalescence, marked cervical adenitis, for many times these conditions are transmissible. All of these conditions may go right through a convalescent ward.

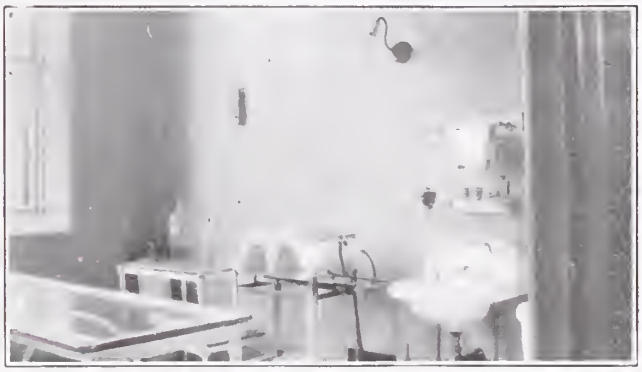


Fig. 5. Note the lavatory with liquid soap container, dish for hand scrub and individual hand towel on a rail.

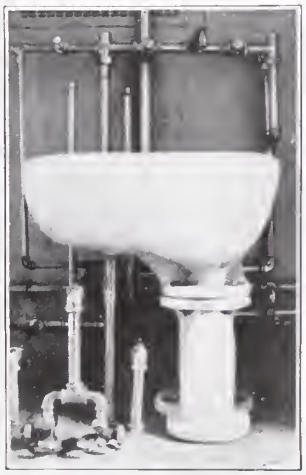


Fig. 6. Slop-hopper; water turned on by foot.

The supervision of the patient should not cease until the final examination has been made to make sure that the patient is physically well, and all complications cleared up, and that he does not take infection home to other members of the family. The discharge examination should be as carefully made and recorded as the admission examination. The patient should be given a bath the day of discharge and transferred to a clean room, a "discharging room." Next day the nurse puts on his clothes and he goes out with much less danger of taking cold or developing a nasal discharge, which in the case of scarlet fever might increase the danger of infecting other children at home.

American Nurse Decorated by the French Government

Decorated by the French government, and having a number of service stripes to her credit, Miss Margaret Mahoney of New York, wears only four stripes to indicate her two years of service with the American Red Cross. However, she has the right to wear nine.

Miss Mahoney was presented with the highest award of the French Red Cross for her services to the French wounded, and, upon landing in New York, she was informed that the French government had presented her with another decoration, the Medaille de Reconnaissance de France.

LESSONS FROM RECONSTRUCTION HOSPITALS

The Industrial Cripples To Profit by Lessons the Injured Soldier Has Taught—Encouragement, Reeducation, and Cure the Three Functions of the Reconstruction Hospital

By L. A. PECHSTEIN, Captain, S.C., U. S. Army General Hospital, No. 10, Boston

NO institution, public or private, can fail to show the influences of the Great War. Contrary to the results of many great wars of the past, most of the changes resulting from this recent war have been for the political, social, and moral advance of the several dozen nations directly or indirectly concerned.

In the field of military medicine, extensive and significant advances in the application of technique have been made. It is not altogether clear that this advance has been due primarily to discoveries of new disease-producing organisms, revolutionary methods of surgery, or any departures deserving to be called original. Rather it seems that the significant advances made represent little beyond application to the acute war problems of the best methods and procedures already employed in the most advanced civilian practice.

One notable exception to this generalization has to do with the rehabilitation of the disabled soldier. For reasons that are obvious, the attention of the medical and industrial worlds has not heretofore been directed in any extensive or organized way toward the problems of conserving the injured man-power of the nation—the congenital cripple or the accidental cripple of industry, the sense-deprived (the blind, deaf, dumb, etc.), the tuberculous, the neurotics, and like groups. The several combatant nations have been led to bring all available energies to bear upon this big and important problem, namely, to restore each disabled soldier to the fullest possible functional efficiency. And if this task means merely the gigantic one regularly met by the administering of drugs and the use of the operative instruments, it could scarcely claim anything unique excepting its magnitude.

But the rehabilitation of the soldier has meant much more. It means, in a strictly medical sense, the employment of all types of physiotherapy—massage and electrotherapy, hydrotherapy, and mechanotherapy. In a sense no less medical, it means the employment of all available means for keeping the patient's mental attitude or morale in a condition which will contribute to his more rapid recovery. Again, it means the employment of all such types of interesting occupational work as will exert direct curative effects upon the poorly functioning joints, muscle groups, etc. Finally and of supreme importance, it means in many cases the partial or complete re-education of the soldier-patient, so that he may again maintain a position of economic independence in the social world.

These three novel aspects of the modern reconstruction hospital—securing the best morale possible, employing occupational work of a curative type, and re-educating to guarantee social and economic independence—warrant somewhat detailed description. This article will set forth the methods and practices followed in U. S. Army General Hospital No. 10, Boston, Mass. It will be suggestive of the work in all the reconstruction hospitals of the United States Army, since this work has been standardized by the centralized directing agency, the division of physical reconstruction, Surgeon-General's office.

It is, of course, clear that these three aspects are never wholly distinct from each other, nor should they be. For example, the morale of a certain patient may become improved only because he is assigned some curative work, the value of which he can see; on the other hand, the morale may become improved because the re-educational work assigned opens up a better vision of the future. In many cases the soldier in the hospital will develop a better mental attitude simply because he has something for his hands and mind to do, even though the task employed lacks any directly curative or re-educational reference.

The men who are responsible for the morale-curative-reeducational program of the army hospital cannot afford to lose any time in registering an approach to a new patient. Within twenty-four hours after he arrives from the port of debarkation and right after he has been given the immediately necessary medical attention, the patient must be given a letter of welcome from his new commanding officer, and the representatives of the educational service must call upon and tactfully interview him. These men are the best students of human nature we have been able to secure. It is their duty to gather all the facts which should influence the assignment of the patient, for instance, his present physical and mental condition and its needs, his education and intelligence, special aptitudes, past occupational

record, his interests and desires for the future, the permanent physical handicap, etc. In the light of all these, the interviewer must lead his man to make some selection for immediate and future work. Very often the selection is acknowledged to be only temporary, for the psychological moment when a disabled soldier decides his future comes at no definite time. It is essential, however, that the patient choose something to do immediately, even though it is necessary to leave the more weighty problems to the decision of the future.

We offer the patients many opportunities for active and interesting employment. This may be of a type which can be administered at the bedside, in the educational class rooms, or in the technical shops. The bedside occupations are generally light in the demands they make upon the patient's strength, are of little educational or vocational value, and are inherently attractive. They include the following: basketry, beadwork, block printing, bookbinding, chip carving, clay-modeling, cord work, design, leather work, mop- and brush-making, netting, rake-knitting, rug-making, tin-can work, toy-making (tin and wood), weaving, and wood-carving.

At the earliest moment which the strength of the patient permits, he is transferred from the beside work to the more masculine work of the classrooms and shops. Here the work becomes more definitely curative and re-educational. It may be either technical or of a general educational character. If it is technical and assigned for a curative purpose, the work of sawing, pushing a plane, turning a screw-driver, using the foot treadle of a small printing press, etc., furnishes the exact exercise needed to speed the functional restoration of the injured member. On the other hand, this technical work may be wholly re-educational. The man with a lower-limb amputation may be discounting his earning handicap by learning commercial and clerical work, linotype operating, telegraphy, or textile weaving. The men with heart disease or with single-arm amputations, and the tuberculous, etc., have distinct problems and different avenues for meeting them. Again, the majority of patients will not need to seek new fields of employment, and these men generally choose to spend their period of convalescence in the classrooms, where opportunity is given to supplement their earlier school training or to take advantage of opportunities which have been too often denied our large number of illiterate soldiers.

To meet the needs and interests of the reconstruction patients, very extensive provision must be made to offer many courses of instruction, both general and technical in character. Among the former we offer the following: reading, writing, spelling, elementary and advanced arithmetic, grammar, American history and civics, modern languages, science, and high-school and occasionally college subjects.

In technical education, opportunities are provided as follows: auto mechanics, auto repair work, vulcanizing, artificial-limb construction, carpentry, commercial work (business English, bookkeeping, commercial law, business penmanship, shorthand, typewriting, civil service, advertising, salesmanship), drafting, jewelry repair work (hand and machine), tailoring, toy making, cartooning, wood carving, commercial art, and sign writing.

In many cases the needs of the patient cannot be met while he is still in the hospital. It then becomes the privilege of the educational officers to put him in touch with the representative of the Federal Board for Vocational Education. In fact, the educational service of the hospitals can expect to accomplish no very extensive or uniform results in re-educating the permanently handicapped soldier. This task is extra-hospital in character, and is properly assigned to the civilian control of the Federal board. It is therefore absolutely essential that the work of the educational service within the hospital should articulate with the subsequent endeavors of the Federal Board for Vocational Education.

The personnel required to administer the program of rehabilitation work which has been sketched must be sufficiently large and varied in skill to meet all reasonable demands of the students. It must be organized in clearly distinct sections or else good administrative economy will not be secured. In the service at Boston there is maintained a six-fold departmental organization. The first is purely administrative, and is concerned with the problems of supplies, equipment, programs, records, attendance, etc. The second is psychological in character, and is responsible for the interviewing and assignment of all patients to work. The three instruction departments—bedside occupational, general, and technical education, interrelate in a complex fashion which cannot be described here. The last department is the recreational or morale division. It assumes charge of all entertainments, supervision of self-initiated patients' affairs, welfare work, etc., and goes a long way toward co-ordinating the splendid work of the various welfare agencies, such as the American Red Cross, Y. M. C. A., American Library Association, Knights of

Columbus, Jewish Welfare Board, and the important efforts along social lines made by private individuals and clubs.

Our experiences in the reconstruction hospitals suggest three matters meriting consideration by the modern civilian hospital. In the first place, it seems clear that the need for bedside occupational work is no less in the civilian hospital than in the military. Hospital authorities may well consider whether they should not appoint several occupational aides (using the official term given to these splendid women teachers of the arts and crafts) and consider these as regular members of the staff with a status analogous to that of the ward nurse. Occupational therapy has a justifiable claim to make for such recognition.

In the second place, civilian hospitals can well afford to employ the same curative measures that the army has found of so much therapeutic value. It is not too much to expect that the up-to-date civilian hospital of tomorrow will be equipped with shops and schoolrooms, where the patient may hasten his own recovery by performing exercises of a definitely curative type.

In the third place, the civilian hospital must profit by the wonderful demonstration the United States and her allies are making with the retraining of the war cripples. The results being secured in this work are far beyond anything considered possible before the great war. But it is significant to note that there are more industrial cripples added yearly to our list in the United States than there are patients for our re-education from the casualties of the American Expeditionary Forces. If the military hospitals and the Federal board can do so much toward making nearly all these war heroes contributing members of society, it follows that there should be devised the machinery for handling the annual increase in handicapped men which modern industry seems destined to provide. The solution of this problem will undoubtedly come through national and state legislation. Yet, irrespective of the exact agency by which the problem is ultimately handled, the civilian hospital will be unavoidably and significantly connected. It is not premature for the civilian authorities to give serious thought to the situation and to begin to apply the conclusions drawn from the experiences in the military hospitals. And when this is done, social advancement no less weighty than that secured upon the European battlefields will be attained.

KINEMATIC SURGERY IN MILITARY HOSPITALS

Treatment to Provide Reeducation of Muscles to Operate the Artificial Limb

Remarkable results have been achieved in Italian Military Hospitals recently by the use of what is known as "kinematic surgery" the invention of Professor Putti of Bologna University. Professor Putti's methods have aroused intense interest on the part of American doctors attached to the Balkan Commission of the American Red Cross who are supervising the artificial-leg factories in Athens, Salonica, Belgrade and Bucharest.

At the present moment the Allied soldiers in the Balkans who have lost their limbs are being fitted with artificial legs and arms of a type similar to that employed by Sarah Bernhardt. Prof. Putti's methods, however, are a distinct advance over all other artificial appliances.

His treatment of amputated limbs consists of a unique preparation of the stump to develop a "motor" end to the cords which, after being bound together over a smooth "bearing" of bone, get as much as a three-inch travel of the leg by means of a reeducation and coordination of the muscles of the stump. After the stump heals, Professor Putti cuts out a flap of flesh which he folds back into an incision to take the flap. This is allowed to heal and then, through the loose flap of flesh, a metal bar with attachments to operate the artificial limb below is suspended.

The muscles of the calf and thigh readily respond after some weeks to the movement of the artificial leg and soon the pressure of the swinging of the artificial leg reeducates the muscles through the flap of flesh so that it may be said that the muscles of the stump actually operate by themselves the mechanical features of the artificial limb.

ARMY MEDICAL CORPS KEEP EFFECTIVE NEARLY NINETY-FOUR PER CENT

Out of 195,000 Wounded, 182,000 Have Recovered—Work Blends With Red Cross in Many Ways

The record of the Army Medical Department on dispatching its duties of war stands out in bold relief as one of the greatest accomplishments in the records of medicine. It was the rôle of the Red Cross to supplement this work and all activity relative to the preservation of the life and health of the fighting men had its Red Cross phase. The Medical Corps and the Red Cross are noncombatant branches of the mobilized forces of the nation, but together, in the great war they waged the longest, hardest, biggest battle of the war; one, in fact, that is not yet ended, and one by which the lives of those 195,000 wounded Americans were ransomed. Of this number 182,000 have recovered.

Statistics show beyond all dispute that the American Army was the healthiest and cleanest army that ever fought. By far the greatest toll of deaths from disease was taken by pneumonia and influenza during the general epidemic that at the time was world wide. Deaths in the army from this cause are placed at 8,000. There were only 1,000 cases of typhoid, fifty of which were fatal; venereal cases never exceeded 4 per cent, an exceedingly low figure in an army in the field. Dysentery was present at one time, but this was checked before it reached the epidemic stage.

The Army Medical Corps and the Red Cross were able to keep 93.75 per cent of the fighting forces effective for duty at all times and of the remaining 5.7 per cent only 3.4 per cent were incapacitated through disease. This is a record on which they can look back with satisfaction.

FROM OUR FIELD EDITORS' NOTEBOOKS

The Hospital of the Waddingtons at St. Remy, a Hospital That Justified a Prophecy—An Old People's Home in France—A Hospital for Wayfarers

St. Rémy, Eure et Loir

St. Rémy is near Dreux in lower Normandy. This hospital cared for many wounded poilus during the war, and was supported entirely from the funds and labor of M. and Mme. Waddington and their friends. The Waddingtons are a respected and loved family of that part of France.

The story is told in Dreux that some time very early in the summer of 1914, M. Waddington visited Germany. Before his business was completed there he returned hurriedly to France and told his friends in authority in Paris in the government offices that Germany was soon going to attack them. They laughed at him for his pains. Firmly believing himself right, however, he returned to his château at St. Rémy and he and his wife proceeded to fit it up completely for hospital purposes. The day that war was openly declared he telegraphed the headquarters of the Service de Santé in Paris, "Gentlemen, my hospital is ready."

The Waddingtons are only one of the many families in France who have heroically sacrificed their private fortunes, their homes and their health and strength in war service.

Hospice des Vieillards, Dreux, Normandy

One cannot imagine a quainter picture of contentment than this. A little house and vegetable garden, a tiny parlor and a kitchen, a lingerie (linen room), a room for the sisters, two clean bedrooms above with orderly rows of empty beds. They are aired only when patients are out of them for a few hours a day, and in a warm room below are the patients, eight happy old men playing dominoes.

The whole place is spotlessly clean. In the tiny parlor is a great pile of unopened newspapers, one more carefully added each day as it comes. It is a picture of ideal peace and quiet; the world has passed it by.

Hospice de Toury, Eure et Loir, France

Toury is on the main road, not far from Janville, where Joan of Arc rested on her way to win the battle of Orleans, and one reaches the hospital by winding through crooked streets till one comes to a door in a high wall, guarded by a blue-robed virgin in a niche above. Then, to enter, one must ring the bell by pulling a long chain which hangs down the wall beside the doorway. A black-gowned sister with a huge flaring linen cap answers and invites you into a tiny garden court, and from there takes you across to the miniature institution beyond.

This quaint little place is a hospital with just two rooms for patients, one for men and one for women. Each has about three beds in it, another room on the court for the two sisters, a kitchen and a small outhouse.

The hospital was founded in 1730. Here is the story of its foundation as the superior, a sister of the order of Presentation de Tours told it to me:

One night in that year, a traveler, who was ill and had no place to rest his head, came to the little house and found shelter, food, and hospitality. He was old and apparently very poor, and he stayed on and on, and the patient sisters nursed and comforted him until his feeble hold on life had ceased. In time the traveler died and it was found then that he possessed several thousand francs, a fortune in those days, and that he had willed this fortune as a fund to provide for other travelers who came after him to the little house behind the wall. And to this day the hospital is a place for ill and homeless voyagers to rest and find care and comfort.

A group of patients and nurses at the St. Rémy hospital given to France by the Waddingtons.

The MODERN HOSPITAL

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The Cincinnati Meetings; Problems Confronting the American Hospital Conference

In a month which is to witness at Cincinnati the first joint meeting of the American Hospital Association with the new and promising American Hospital Conference, the eyes of hospital men turn expectantly toward Ohio's southern metropolis. Besides the joint meeting, the Cincinnati program includes the twenty-first annual convention of the American Hospital Association and the first meeting of the American Hospital Conference, the latter affording a common meeting ground to twelve organizations of national scope, all interested in important phases of hospital development. It will be a great disappointment to those who, year in and year out, have striven to advance the interests of hospitals if, at the conclusion of the Cincinnati meetings, the outlook of hospitals for more adequate support and for a higher development, is not distinctly improved.

There is reason to anticipate important results from these Cincinnati meetings. In the matter of attendance, the meetings of the conference will be unprecedented in character, for there will be present representatives of the American Medical Association, the American College of Surgeons, the American Hospital Association, the American Nurses Association, the Association of Hospital Social Service Workers, the Association of Medical Colleges, the Catholic Hospital Association, the Confederation of State Medical Licensing Boards, the Association of Industrial Physicians and Surgeons, the United States Public Health Service, and the medical departments of the Army and Navy. The cooperation of these organizations in a common effort to improve hospital work is a phenomenon new to the hospital world.

Each group of delegates, doubtless, will go to Cincinnati prepared to present carefully conceived plans to promote the objects of the conference. I base my own hopes for the success of this and of subsequent meetings of the conference upon the manifestly sincere and hearty desire of the various elements to unite for the attainment of their common goal. Evidences of the existence of a warm spirit of cooperation have been numerous and unmistakable. Such a spirit must not be permitted to languish for lack of appropriate nourishment. It can best be sustained by the adoption of a working program which will absorb the energies of the delegates and which will enlist the cordial support of the powerful organizations behind them. The forces that have been enrolled, if wisely guided, will speedily find a solution for many problems that have long baffled individual institutions as well as associations of specialists possessing valuable but incomplete knowledge and limited resources.

Let me suggest a number of topics which in my opinion are entitled to receive the early and earnest attention of the American Hospital Conference:

1. The training of men in medical administration. Why is this important? Because, as pointed out elsewhere, there is a lack of clearly defined principles in the development of the machinery of the country for dealing with disease. Men trained in medical administration would discover such principles and would be qualified to apply them. The country has drifted into its present chaotic condition (I refer to conditions in the field of medicine) because it has been nobody's business to furnish guidance in matters of medical administration. If we simply muddle through, it will be at the cost of untold suffering and at the needless expense of countless lives. Think our way through we never shall, if the thinking is left to men whose thought and strength are absorbed chiefly by other tasks. Doubtless the best way to deal with this question is to have the study of medical administration organized and directed under university auspices. The future may safely be left to trained leaders when there are trained leaders. It would seem to be the duty of the American Hospital Conference to evolve a plan

for the training of leaders in medical administration which will appeal to the men who control the great centers of medical and public health teaching. For an acceptable plan, financial support will not long be lacking.

2. The reorganization of nursing education upon lines to suit the times. In three states there have been presented recently six different plans for the solution of the nursing problem by legislative enactment. Another plan, which calls for hospital action but no legislation, was recently proposed by an association of New York hospitals. Meanwhile, the obvious need of the public remains unsatisfied. The nursing problem is many-sided. It involves questions of teaching methods, of preliminary education, of hospital and university affiliation, of public health need, of competition with other vocations, of the relation of physician and nurse, of specialization within the nursing field, of military requirements, of legislation, of commercial exploitation, and of finance. Never before have these multifarious questions been approached by a body so competent to deal with them by virtue of its authoritative and diversified membership.

3. The coordination of the work of the several organizations which have heretofore endeavored, independently of each other and without sufficient authority and experience, to define and establish adequate minimum standards of medical care in hospitals. Such coordination is necessary if the best results are to be quickly won. The adoption of a conciliatory policy by each of the organizations concerned is a prerequisite. Recent official utterances happily indicate the prevalence of the belief that there is ample room for all.

4. The development of a plan for the training of clinical aids, the necessity for which arises from the inability of the hospitals to obtain a sufficient number of interns. We may talk from now until doomsday about hospital standardization in the matter of hospital records, but we shall get nowhere so far as the smaller hospitals are concerned, unless there is brought into the service of such hospitals a group of workers who are capable, in some degree, of taking the place of the missing interns. Fully half of the smaller hospitals of the United States are today without interns. While the shortage of interns was accentuated by the demands of the army during the war, underlying conditions are such that the cessation of the war will not bring adequate relief, for while during the past fifteen years the number of medical students in the country has been steadily diminishing, the number of hospital beds has just as steadily increased. The medical schools are prepared to graduate only about 3,000 students per annum, less than half the number that the hospitals of the country could use to advantage. This means that in half of the hospitals of the country, the work of the intern must be taken over by the visiting staff or must be neglected. But with the best will in the world, the visiting staffs of hospitals that have no interns *can not* see patients promptly enough after their arrival, *can not* take proper histories, record operations, secure adequate and timely surgical assistance, render prompt first aid in minor accident cases, make full clinical notes, perform the required urinary analyses and blood examinations, or give suitable attention to infected wounds which demand prolonged antiseptic treatment. For all of this work resident assistants are needed. Hence, the suggestion that a course of training be inaugurated for non-medical clinical aids, embracing, perhaps, the subjects of anesthesia, first aid, surgical dressings, simple laboratory technique, history-taking, technique of the operating room, and clinical records (to which might be added optional courses in stenography and typewriting).

5. The formulation of a program for the application, through successive stages of development, of the principle of group medical practice in all medical institutions and in all parts of the country, urban and rural. This problem demands, first of all, an answer to the question: What does the authoritative opinion of the day regard as the ideal organization of medical service? Next, we shall doubtless be forced to concede the impossibility of speedily and universally attaining perfect group organization. By what practicable means, then, can existing medical agencies be advanced somewhat along the road which leads to the ideal? To state the problem differently, it is necessary to define what might be termed a Class "A" medical organization for the practice of group medicine; and with this definition in view, to define an organization of a somewhat lower but attainable character, designating this as Class "B." In some localities, it may be necessary to be content, for a time, with a third class, "C." In that event Class "C" organizations must be regarded and labeled as transitional.

6. In the light of modern knowledge of disease and its treatment, the American Hospital Conference should undertake to formulate a hospital program, or (if in the judgment of a competent committee the combination is deemed desirable) *a combined hospital and public health program*, adapted to the needs and varied circum-

stances of urban and of rural communities. What is proposed here is a quantitative as well as a qualitative program, a statement of the number of beds and clinics to be provided, their classification and coordination. For example, let such a city as Detroit, Mich., or a smaller city, such as Easton, Pa., or a typical farming county in Kansas or Minnesota, know exactly what those who are qualified to speak expect of it and advise it to do in the matter of hospital construction, hospital management, and hospital support.

7. The investigation of the need of post-graduate teaching for medical practitioners, and the presentation of workable schemes for the development of teaching centers within the framework of existing hospital and dispensary organizations.

8. The formulation of a plan for the progressive development of hospital social service and for its coordination with other forms of social work.

9. The standardization of the intern year, with the safeguard of a plan for automatic periodic revision of the first provisional standards.

The foregoing list does not by any means exhaust the list of topics to which the American Hospital Conference might appropriately address itself. Other questions, timely and important, will no doubt be presented by the delegates, and it is more than probable that a steering committee will be needed to confine the program within negotiable limits. With many tasks of weight and urgency awaiting its attention, the Conference, let us hope, will soon win for itself a place among the country's most potent social and educational agencies

S. S. GOLDWATER, M. D.

Institutional Membership in the American Hospital Association

At the Atlantic City meeting of the association last year, it was decided to admit to membership the various institutions of America. The importance of this step, while thoroughly appreciated by those responsible for the movement, may not have been seriously considered by most of the members present. A question now arising in the minds of many is: What are the institutional members going to receive in return for their fees? Unless the association manages to give a return of adequate value, there is bound to be disappointment and dissatisfaction.

The American Hospital Association has held together from the mere fact that once a year the members meet one another and talk over the many difficulties they have to contend with in this ever-growing age of advancement in the scientific administration of hospital work. This year institutional members will be represented, for the most part, by members of the boards of trustees, who will come expecting to hear something of enlightenment from the platform—something to inspire them in giving more time, greater attention, and abundance of help to their superintendents in the many difficult and interesting problems of the institutions which they represent.

We have had inspections, within the past year, of our institutions by the American College of Surgeons, which has done a colossal work throughout this country in the first attempt to standardize the institutions of America. The results must have astounded the man primarily responsible, as well as the members of his worthy board. All these institutions are clamoring to know where to get guidance in making them desirable and efficient places for the charitable treatment of human suffering.

Other institutions are asking for help in meeting their practical, material problems. They want facts on efficient, financial management. These people are asking that more superintendents be called on to present practical problems for discussion. One superintendent says that the American Hospital Association now has the opportunity, because it is securing the interest of a larger number, to standardize hospital work in all departments to be really economical and efficient.

"Hospitals in the United States," he goes on to say, "have come to be very important institutions. There must, however, be greater attention paid to the financing of them. They must not depend upon the whims and fancies of the philanthropists so much as heretofore. It must be considered a large business, but a business, it is true, with a big heart in it."

These are some of the straws which show which way the wind of expectation is blowing so far as institutional membership is concerned. It is fair to remember, however, that institutional membership has only just been initiated, and that, if the association is to have anything to sell in the future, it must, during the difficult period when it is preparing and assembling its wares, be able to command patience, faith, and cooperation from the members themselves. The officers of the association have been working hard on the plans for service bureaus, the general outlines for which have been approved by the board of trustees. Considerable progress has been made, it is understood, on plans for a service bureau on dispensaries and the community relations of hospitals; plans for a legislative bureau and a bureau on hospital construction are also under way. Altogether, it would seem that a great deal has been

accomplished considering the short time that institutional membership has been in effect and the serious handicaps under which the officers have labored.

H. E. WEBSTER.

Air Control: The Next Great Step in Hospital Practice

In the war against Germany the world learned that control of the air is absolutely essential to victory. In the next great war against disease the same lesson must be learned, although in another way. Whatever we may believe in theory, the general practice in hospitals is to proceed as if the following conditions of the air were desirable:

1. An average temperature not lower than 68 degrees.
2. As little variation of temperature as is consistent with keeping the air pure and fresh.
3. Whatever degree of humidity the weather may happen to determine; that is, a relative humidity of 10 to 15 per cent on very cold winter days, and every other degree of humidity up to 100 per cent on wet days in summer.

No one of these conditions is correct. The first is a little wrong; the second, decidedly wrong; and the third would be criminally wrong were it not due to ignorance. In place of these unhealthful conditions every up-to-date hospital ought to substitute the following:

1. An average temperature of about 64 degrees for day and night together.
2. As much variation as possible, provided the patients do not become chilled.
3. A relative humidity of about 70 per cent when the mercury stands at about 65 degrees. In winter the humidity may have to be somewhat lower if 70 per cent causes too much condensation on the cold walls.

The proof of these statements is found in an article by Professor Huntington in the first number of *Modern Medicine*, and in his new book, "World Power and Evolution." He has made a study of the relation of temperature and humidity to about sixty million deaths in a dozen or more countries. About four hundred thousand of these deaths occurred in New York City during a period of eight years, and were examined in relation to the weather on the *day* of their occurrence. Nearly nine million more, in France, Italy, and the United States, were treated similarly with the *month* as the unit, each city being studied separately. The other fifty million were examined sufficiently to determine that they agree with those studied more minutely. No previous investigation of health in relation to climate has been made on anything like so vast a scale or with so much precision and detail. This fact, coupled with the remarkable agreement between widely separated parts of the world, makes it the duty of every progressive physician to study Professor Huntington's results and apply them to his own particular problems. The chief results may be summarized as follows:

1. For the white race the optimum or most favorable temperature, so far as physical health is concerned, is an average of 64 degrees for day and night together. That is, the thermometer may rise to 70 or even 75 degrees by day and fall to 60 or 55 degrees by night.
2. The optimum temperature is practically the same no matter whether people live in the cold north or the warm south. Even among negroes it is no higher than 68 degrees and perhaps lower. There appears to be almost no such thing as real acclimatization involving a fundamental change of physique. An unfavorable climate merely causes man's activities to proceed at a slower rate or on a different level.
3. Variability, both from season to season, and day to day is highly favorable. The value of changes from day to day, however, is much less at low temperatures than at high. Variability involves movement of the air, a matter of much importance.
4. The optimum humidity varies somewhat according to temperature, but not so much as is generally supposed. On the other hand, the effect of the relative humidity of the air is much stronger than is usually realized, and quite different from our traditional belief. On days with an average temperature of 64 degrees, the ideal relative humidity averages about 80 per cent; that is, on clear days dew falls at night, while at noon the humidity falls to about 60 per cent. At higher temperatures the humidity should be lower than at 64 degrees, but, contrary to the general belief, a decidedly low humidity is distinctly harmful. In fact, if we include the whole United States the health of the country suffers almost as much from dry summer heat as from damp summer heat. At temperatures below 64 degrees—and this point is most important—the value of moist air and the harmfulness of dry air become more and more apparent. The wettest kind of weather would be the most favorable if it were not too monotonous and if our houses and clothes did not become damp. Damp air with dry clothing and variable temperatures is the ideal.

The preceding generalizations have a most direct and important practical application. The first aim in hospital wards should be to have an average temperature of about 64 degrees for day

and night together. This, of course, can be easily accomplished. A *uniform* temperature of 64 degrees, however, is not advisable, for any sort of uniformity is weakening. That is one reason why people are so sensitive to drafts at the end of the winter—far more so than in the fall when they are used to a variable temperature, and have not been softened and weakened by the warm monotony of our winter houses. Hence, in the hospital, the temperature should vary. Starting at 58 or 60 degrees in the early morning, the temperature should rise to about 68 degrees during the next hour or so. After staying near that level for perhaps a couple of hours it should be reduced by opening the windows or in some other way, care being taken not to cause drafts or to make the change too sudden. After the temperature has fallen from 4 to 8 degrees during the course of perhaps fifteen minutes, it should gradually rise again, the rise being slower than the fall. This process should be repeated three or four times during the day, while at night it should also take place in the same way except that the low temperature should be more pronounced and continue longer.

The best degree of variability has not yet been determined, but it can easily be ascertained by experiment. The two essentials are, first, that there should be variations, and, second, that they should not be so great as to chill the patients. Newcomers and others who are particularly sensitive should be put in wards where the variation is slight and then gradually inured to greater variability. It must be remembered, however, that if the air is properly moist, as explained below, the chilling effect of a drop of temperature and of moving air will be much less than under the dry unhygienic conditions which prevail in most hospital wards in winter.

Turning now to moisture, Professor Huntington's data show that in winter the damper months have from 5 to 30 per cent fewer deaths than the dry months of similar temperature. This is true in France and northern Italy as well as most parts of the United States—everywhere, apparently, except where the climate is so warm that the houses are not heated. Obviously the increase in the death rate in dry winter weather is due to the extreme aridity of the heated air within doors. Similar aridity is probably the reason for the excessive death rate in dry cities like Cairo and Lucknow, much higher than in moister tropical cities like Bombay and Calcutta. What is needed in our hospitals in winter is moist, variable air like that which conduces to such excellent health in October and May.

It is easy to humidify the air. Professor Huntington has explained an inexpensive method in the appendix of his "World Power and Evolution." The essential point is to supply a large evaporating surface. This can easily be done by placing under each radiator or near each register a pan of water. The lower ends of absorbent cotton cloths lie in the pan, while the cloths are spread out above and suspended from horizontal strings or rod. If such cloths are placed behind radiators they are both inconspicuous and effective. Their area can easily be varied to meet the demands of different kinds of weather. While the ideal air for the lungs and body should have a relative humidity of 80 per cent at a temperature of 64 degrees, practical considerations render that too high. If 60 per cent can be maintained at that temperature, or let us say 50 per cent when the temperature rises to 68 degrees, it will serve admirably. With such humidity and a variable temperature, the health of hospital patients should show a marked improvement.

Hospitals As War Memorials

Among "Letters to the Editor" this issue we publish a communication on "Hospitals as War Memorials," by Mr. Luther H. Lewis of New York City. We agree with Mr. Lewis when he says that no building or institution would make a more fitting memorial than a well-designed hospital. And in saying this we have no desire to detract from the recommendations of the National Committee on Memorial Buildings that war memorials, instead of a shaft and statue, or a mausoleum, should take the form of a community house equipped with assembly hall, gymnasium, swimming pool, game, club and recreation rooms.

Properly managed, a community house can, of course, do much for the well-being of the citizens of the community. But health is one of the foundation stones of community well-being. It makes for a happy and efficient democracy. And hospitals play an important part in restoring and maintaining health.

Hospitals and the spirit they embody, moreover, are altogether in keeping with the spirit in which we waged the war—the spirit of service. As war memorials they would help the living while commemorating the dead, to use the happy phrase of the *American City*.

Incidentally, memorials of this character would offer the relatives and friends of soldiers who sacrificed their lives in the war the opportunity to endow beds in their name, thereby perpetuating their memory in a ministry to human need.

One of the first communities to adopt this form of war memorial was the Fourth Ward of

Queens County, New York, whose citizens recently raised $500,000 in a memorial hospital campaign. These funds will be used to erect greatly needed new buildings for the Jamaica and St. Mary's Hospitals as memorials to one hundred and twenty-three boys who gave their lives in the country's service. Superintendents and others who are interested in seeing that adequate hospital facilities are provided, would do well to stimulate their community to follow the splendid example of the citizens of the Fourth Ward of Queens County, New York.

An Extension of The Modern Hospital Service

The excessive demand for nurses and other hospital personnel incident to the war and the influenza epidemic resulted in serious disruption to the organization of the civilian hospitals of this country. Some of these institutions have recovered their normal status, but, owing to the fact that many hospital workers who entered Red Cross or government service have gained promotion in new fields, a great many institutions are still without an adequate working force of the grade required for the most efficient work.

Naturally the greatest need is for persons capable of filling executive and special positions. This need has become so acute that THE MODERN HOSPITAL has inaugurated and is maintaining, free of cost to hospitals and to hospital workers, an Employment Service Bureau, designed to bring together the hospital needing help and the trained worker who is out of a position or who desires to make a change.

Persons who can qualify for positions as superintendents, superintendents of training schools, head nurses, dietitians, surgical nurses, anesthetists, laboratory technicians, etc., are invited to register with this bureau, using the registration blank provided on page 90 of the advertising section of this issue of THE MODERN HOSPITAL. The same invitation is extended to hospitals having vacancies, and a suitable blank for the reporting of vacancies will also be found on page 90.

No fee of any kind is charged for the service given by this bureau, and THE MODERN HOSPITAL assumes no obligation to secure employment for registrants, but when notified by hospitals of vacancies will submit, without recommendation, the names and credentials of all registrants who appear to be qualified for the particular position.

It is believed that, with cooperation both from the hospitals and from qualified persons available for hospital positions, THE MODERN HOSPITAL will be able to render material assistance in the readjustment of hospital organizations.

Morale

The success and the development of morale work in the United States Army should not be allowed to pass unobserved by those interested in problems of administration. The principles governing the germination and growth of good morale are as applicable to a hospital organization as to a military one; though the details may differ, the underlying principles are the same. Captain Bresnahan's article on page 168 of this issue and Captain Pechstein's on page 194 have, therefore, value as well as interest for the civilian hospital administrator.

What is meant by "morale" is somewhat difficult to define because it is a single word which expresses a complete idea. This idea, though old as the hills, has only lately been given the prominence it deserves. Briefly, morale is the "will to win," and morale work is all that pertains to the development of that will.

An organization that has proper morale has not only contended but enthusiastic members. They not only believe that their organization is the best of its kind, but they are proud to be a part of it and they realize the importance of doing their part, however small, well.

Unlike many other sentiments, morale grows from above downward, and cannot be expected to successfully reverse itself and begin to grow from the bottom upward. If there is good teamwork and an atmosphere of definite purpose in the office of the administration, the cultivation of proper morale throughout the institution, extending to the lowest basement, is quite possible. This cultivation, however, like everything else worth while, needs a watchful cultivator. Moreover, a definite and orderly procedure in the work of extending proper morale is very necessary. A study of army methods and their adaptation to administrative problems involving the "will to win" will be very profitable to the up-to-date hospital executive.

Dr. Abraham Jacobi

In the passing of Dr. Abraham Jacobi, for some years fondly characterized as "the grand old man in medicine," the medical field lost one of its outstanding personalities. Of his fearless character, his staunch Americanism, his professional ability, especially in the field of pediatrics, his skill as a teacher, as well as his interest in public affairs, much can, and will, be written. But we choose to comment briefly on his hospital interests and activities.

Born on May 6, 1830, in a Westphalian village, Dr. Jacobi studied medicine in Greifswald, Göt-

tingen, and Bonn. Shortly after he graduated he spent two years in prison, because he held convictions which ran counter to the wishes of the German government. After his release he tried to practice medicine in Manchester, but failed; later he came to New York where for nearly half a century he was actively engaged in an extensive private and hospital practice.

In 1857 he aided in founding the German Dispensary, and in 1868 the German Hospital, now known as the Lenox Hill Hospital. As early as 1860 he became an attending physician at Mount Sinai Hospital, New York City. Later he acted as the hospital's specialist in the diseases of children, and, finally, as consultant and president of the medical college.

The New York Medical College, which was founded in 1850, was reorganized in 1860. Dr. Jacobi was appointed full professor of the diseases of children. Here Dr. Jacobi and his colleagues introduced the first genuine systematic bedside instruction in New York City in a small hospital of twenty-eight beds. This school, however, had to close its doors in 1864 on account of the Civil War. In this same year, moreover, Dr. Jacobi was given a place in the Nursery and Child's Hospital. Here he found a mortality of one hundred per cent and when he tried to correct the situation by proposing a farming-out system he was asked to resign, and, refusing, was expelled in 1870 by his own colleagues, most of whom he had appointed.

In 1898 Roosevelt Hospital, by agreement with Columbia University, opened up a small ward of twelve, and later sixteen, beds, known as "The Jacobi Ward," and appointed Dr. Jacobi visiting physician. This ward was endowed for bedside instruction by Dr. Francis Huber, an assistant of Dr. Jacobi's in the College of Physicians and Surgeons for about thirty years. Dr. Huber speaks of the endowment as "an attempt to repay antemortem his obligations to his alma mater and to his friend and revered teacher." This was the only ward of its kind that existed in New York City since the close of the New York Medical College in 1864. A prominent medical journal speaks of the opening of the ward as "marking an epoch in the teaching of the diseases of children." "It seems very appropriate," the journal adds, "that the first ward for this purpose should bear the name of the man who has inaugurated the teaching and practice of pediatrics. It is a most fitting tribute to his life of devotion to that department of medicine."

Dr. Abraham Jacobi.

Dr. Jacobi did not regard pediatrics as a specialty in the common acceptance of the term. In his own words: "It does not deal with a special organ but with the entire organism at the very period which presents the most interesting feature of biology and medicine. It has its own independent range, and by the results of independent research it gives as much to general medicine as it received from it." It was with this attitude that he carried on his hospital work for children. Renowned as a specialist he always insisted upon being called a general practitioner.

Subjects for Round Table Discussion

The round tables of the Atlantic City Meeting of the American Hospital Association last year were generally acclaimed as one of the most successful and interesting features of the program. To have every member thinking over in advance the problems on which he would like light would give even greater value to these impromptu discussions.

THE MODERN HOSPITAL has, therefore, addressed to some representative hospital people inquiries as to the topics they would like to have discussed at the meeting. A few of the replies (many of them came in too late for use) are presented on page 226.

THE FIRST AFTER-THE-WAR CONVENTION OF THE AMERICAN HOSPITAL ASSOCIATION

Important Reconstruction Problems Form Subject of Program—Interesting Developments Looked for in Regard to Standardization—Progress of Institutional Membership—Service Bureaus Now Being Organized

PRECONVENTION BULLETIN, ISSUED FROM THE OFFICE OF THE EXECUTIVE SECRETARY, 308 ANISFIELD BUILDING, CLEVELAND, OHIO

OFFICERS, 1919

President, Dr. A. R. Warner, superintendent Lakeside Hospital, Cleveland, Ohio.
First Vice-President, Dr. Joseph B. Howland, assistant administrator, Massachusetts General Hospital, Boston.
Second Vice-President, Mr. A. B. Tipping, superintendent Touro Infirmary, New Orleans, La.
Third Vice-President, Sister Irmena, R.N., president Missouri Catholic Hospital Association, St. Louis, Mo.
Treasurer, Mr. Asa Bacon, superintendent Presbyterian Hospital, Chicago, Ill.
Trustees, Major Richard P. Borden, trustee Union Hospital, Fall River, Mass.
Miss Mary L. Keith, R.N., superintendent Rochester General Hospital, Rochester, N. Y.
Dr. Robert J. Wilson, superintendent Health Department Hospitals, New York City.
Executive Secretary, Mr. Howell Wright, 308 Anisfield Building, Cleveland, O.

COMMITTEES, 1919

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Mr. Daniel D. Test, superintendent Pennsylvania Hospital, Philadelphia.
Dr. A. R. Warner, superintendent Lakeside Hospital, Cleveland, Ohio.
Dr. A. B. Ancker, superintendent City and County Hospital, St. Paul, Minn.
Dr. B. F. McGrath, professor of the principles of surgery, Marquette University, secretary-treasurer Catholic Hospital Association of the United States and Canada, Milwaukee, Wis.
Mr. Howell Wright, secretary.

COMMITTEE ON OUT-PATIENT WORK

Mr. Michael M. Davis, Jr., chairman, Boston Free Dispensary, Boston, Term expires convention, 1919.
Dr. R. B. Armstrong, Health Demonstration Committee, Framingham, Mass. Term expires convention, 1920.
Dr. Robert J. Wilson, Department of Health, New York City. Term expires convention, 1921.

COMMITTEE ON LEGISLATION

Mr. Pliny O. Clark, chairman, superintendent Ohio Valley General Hospital, Wheeling, W. Va.
Dr. Renwick R. Ross, superintendent Buffalo General Hospital, Buffalo, N. Y.
Dr. Louis M. Burlingham, superintendent Barnes Hospital, St. Louis, Mo.
Mr. Howell Wright, secretary.

MEMBERSHIP COMMITTEE

Dr. S. S. Goldwater, acting chairman, superintendent Mount Sinai Hospital, New York.
Mr. H. E. Webster, superintendent Royal Victoria Hospital, Montreal, Canada.
Rev. Maurice F. Griffin, St. Elizabeth's Hospital, Youngstown, Ohio.

COMMITTEE ON HOSPITAL ACCOUNTING

Mr. Cornelius S. Loder, chairman, 30 Church Street, New York City.
Maj. A. K. Haywood, superintendent Montreal General Hospital, Montreal, Canada.
Miss K. M. Prindiville, superintendent Joseph Lawrence Free Public Hospital, New London, Conn.

COMMITTEE ON CONSTITUTION AND RULES

Maj. Richard P. Borden, chairman, Union Hospital, Fall River, Mass.
Dr. Malcolm T. MacEachern, general superintendent Vancouver General Hospital, Vancouver, B. C.
Dr. Thomas D. Howell, superintendent New York Hospital, New York City.

AUDITING COMMITTEE

Dr. Stewart Hamilton, chairman, superintendent Harper Hospital, Detroit, Mich.
R. G. Broderick, superintendent San Francisco Hospital, San Francisco, Cal.
Dr. H. Philip Hill, superintendent Robert D. Green Memorial Hospital, San Antonio, Texas.

COMMITTEE ON TIME AND PLACE

Mr. Asa Bacon, chairman, superintendent Presbyterian Hospital, Chicago.
Dr. W. G. Nealley, superintendent Brooklyn Hospital, Brooklyn, N. Y.
Mr. Howell Wright, executive secretary.

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1918-1919

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DR. JOSEPH B. HOWLAND
First Vice-President American Hospital Association
Assistant administrator, Massachusetts General Hospital, Boston

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Dr. Ralph B. Seem, assistant superintendent Johns Hopkins Hospital, Baltimore, Md.
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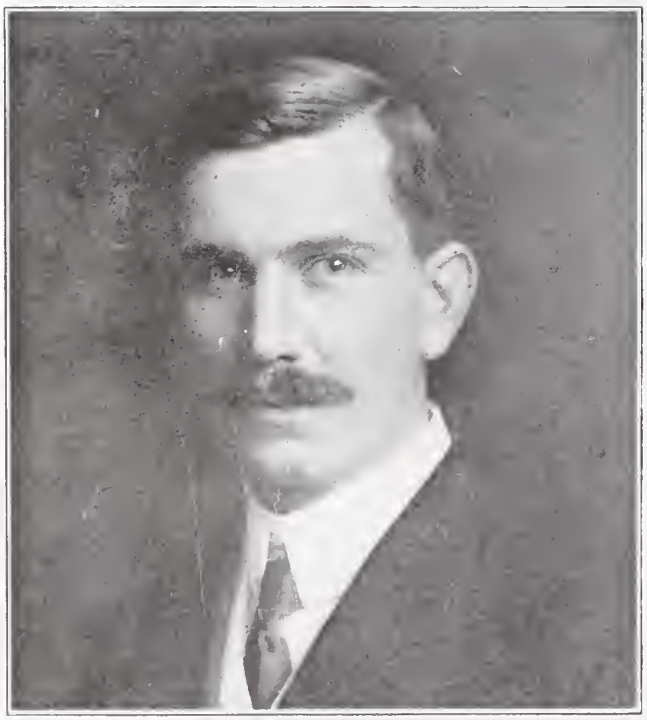
SECTION ON DIETETICS (AMERICAN DIETETIC ASSOCIATION)

Miss Lulu Graves, president and chairman, Home Economics Building, Cornell University, Ithaca, N. Y.



MR. A. B. TIPPING
Second Vice-President Touro Infirmary, New Orleans, La.

Miss E. M. Geraghty, secretary New Haven Hospital, New Haven, Conn.

SECTION ON HOSPITAL ADMINISTRATION

Dr. Louis H. Burlingham, chairman, superintendent Barnes Hospital, St. Louis, Mo.
Dr. Ralph B. Seem, secretary, assistant superintendent Johns Hopkins Hospital, Baltimore, Md.

SECTION ON HOSPITAL CONSTRUCTION

Dr. George O'Hanlon, chairman, superintendent Bellevue Hospital, New York City.
Mr. Oliver H. Bartine, secretary, member of Hospital Committee, New York State Charities Aid Association, New York City.

SECTION ON NURSING

Miss Elizabeth A. Greener, chairman, superintendent of nurses, Mount Sinai Hospital, New York City.

SECTION ON OUT-PATIENT WORK

Mr. Michael M. Davis, Jr., chairman, director Boston Free Dispensary, Boston, Mass.
Mr. Clarence E. Ford, secretary, superintendent of Medical Institutions of New York Board of Charities, New York City.

SECTION ON SOCIAL SERVICE

Mr. John E. Ransom, chairman, Central Free Dispensary, Chicago.
Miss Gertrude Farmer, secretary, Boston City Hospital, Boston.

Plans for the twenty-first annual convention of the American Hospital Association held at Cincinnati, September 8 to 12, 1919, are rapidly approaching completion. The association is most fortunate in its committee on

MAJOR CHRISTIAN R. HOLMES
Chairman Committee on Local Arrangements

local arrangements, the chairman of which is Major C. R. Holmes, well known in hospital and medical circles. Elaborate plans for entertaining the convention have been made. Cordial and enthusiastic invitations of welcome have been extended both by Major Holmes and the mayor of Cincinnati. Major Holmes writes:

"Members and Friends—American Hospital Association:

"As chairman of the Cincinnati committee on arrangements for the annual meeting of the American Hospital Association, which comes to Cincinnati September 8 to 12 I extend to you a cordial invitation to be present at the meeting which we hope to make the greatest in the history of the organization.

"We are proud to have the members of the American Hospital Association as our guests. We want you to come here and have a beneficial and pleasant visit with us.

We want you to carry away a good impression of the Queen City.

"The Cincinnati committee on arrangements will spare no effort to make your stay here one long to be remembered and we sincerely hope that the members of the association will attend in large numbers.

"While here we want you to see our many spots of interest. Naturally, we are anxious to have you visit our general hospital and have arranged to have the sessions on one day of the meeting held at the hospital to give the members an opportunity to inspect it thoroughly. We feel sure that this visit to the Cincinnati General Hospital alone will be worth the effort you may make to attend.

"We don't want you to rush in and rush out. Come to Cincinnati early and spend as long a time as possible with us.

MISS MARY L. KEITH, R.N.
Trustee
Superintendent Rochester General Hospital, Rochester, N. Y.

"Again bidding you a most hearty welcome to the Cincinnati convention, I am,

"Sincerely yours,

"C. R. HOLMES,
Chairman."

The Convention City

Cincinnati is a famous convention city. An illustrated story of its special attractions including its medical school and hospitals appears in this number. Especially prepared literature about the city and the convention, including hotel accommodations and rates, will be mailed this month to members and delegates and guests. The map published in this number will be found a convenient guide.

Attendance at the Convention

A large attendance is expected. The American Dietetic Association and the American Hospital Conference, with delegates representing a dozen national organizations meet jointly with the association. The programs of the meetings of the American Dietetic Association and the American Hospital Conference appear elsewhere. As

DR. ROBERT J. WILSON
Trustee
Superintendent Health Department Hospitals, New York City

last year, the governors have been invited to appoint delegates to the convention and have responded well. A list of the delegates appointed appears on a following page. A special communication has been sent to all the hospitals urging the board of trustees not only to permit their representatives to attend but to make an appropria-

MR. PLINY O. CLARK
Committee on Legislation
Superintendent Ohio Valley General Hospital, Wheeling, W. Va.

DR. JOHN M. DODSON
Member Executive Council, American Hospital Council, Dean Rush Medical School.

tion for their expenses. The following call has been issued by the president of the association and sent to practically every hospital in the United States and Canada:

"To the Trustees and Managers of American Hospitals:

"Your cooperation is needed in an organized effort to work out the 'every-day' and 'after-the-war' problems which now face American hospitals. Hospitals, as other industries, must pass through this period of 'reconstruction.'

"During the war the hospitals of America performed important services. They served as emergency stations in demobilization and transportation of troops; performed various corrective operations making men eligible for service; assisted recruiting officers in determining exact physical condition of applicants for enlistment; they contributed to the problem of providing medical assistance to the families of men in the service; undertook to train increased numbers of pupil nurses; *they willingly submitted to the wrecking of organization by the fact that the greater number of their staffs, interns, and graduate nurses entered the service.* Hospitals must recover and advance.

"'Hospital standardization' is dominant in the hospital mind today. Distinct progress with this problem must be made *now*. The service of hospitals to public health is another problem. Did the hospitals meet the demands of the public in the recent influenza epidemic as they should? If not, what is wrong? What is the proper relation between the state and the private hospital? Workmen's compensation is now before many hospitals and is often a problem. Sickness and health insurance will soon follow. There are also the 'every-day' problems of hospital administration, hospital construction, out-patient work, the training of pupil-nurses, the problem of the present increased cost of food and food service. There are many others. They must be met. Many of them can be solved only by state- and nation-wide hospital organization.

"Institutional membership in the American Hospital Association provides a nation-wide organization with other hospitals and an opportunity to participate in the activities of the Association. *You are urged to participate as an institutional member* and to make use of the enclosed application blank. Advantages of this membership are emphasized in the enclosed editorial. Whether your hospital is now, or becomes, a member of the association or not, *you are urged to send your representatives* to the twenty-first annual convention, September 8-12, 1919, Cincinnati, Ohio. Participation in this meeting will demonstrate the full value of institutional membership to your hospital.

"Please communicate with the secretary for further information.

"For the American Hospital Association,
"HOWELL WRIGHT, Executive Secretary. A. R. WARNER, President."

Registration

Members, delegates, and guests and others are expected to register as soon as possible after their arrival in the convention city. The registration bureau of the American Hospital Association is located on the ball-room floor of the Hotel Gibson. There will be separate registration for *personal members* of the association, for *institutional delegates*, and for *state delegates* appointed by the governors. Badges will be furnished.

Connected with the registration bureau will be an information bureau and postoffice at which members and delegates may call for letters and telegrams.

Application blanks for personal as well as for institutional membership will be available at the registration bureau, but no attempt will be made to collect membership dues of any kind.

Registration for the American Dietetic Association will be on the mezzanine floor of the Hotel Gibson. Registration is in charge of the local committee.

DR. WALTER L. BIERRING
Member Executive Council
American Hospital Conference

Meeting Places

FOR GENERAL SESSIONS, SECTION MEETINGS, AND COMMITTEES

Members, delegates and guests are urged to familiarize themselves with the location of the various meeting halls. The following diagrams are included for this purpose:

Diagram A—Mezzanine floor plan, Hotel Gibson.

On this plan will be found:

Room D, Architects' Exhibit.

Lobby, Non-Commercial Exhibit.

Lobby, Commercial Exhibit, American Dietetic Association.

Lobby, Registration Bureau, American Dietetic Association.

The following meetings will take place on this floor:

Room C, informal discussions on Hospital Construction under the direction of Dr. John A. Hornsby, Special Secretary, American Hospital Association.

Room B, business and section meetings, American Dietetic Association. (If room proves too small, these meetings will be held in the Cascades Room, basement floor).

Diagram B—Convention Hall and ball room floor, Hotel Gibson.

On this plan will be found:

Convention headquarters, American Hospital Association.

Offices of the president and the executive secretary.

Committee room for small committee meetings.

Registration Bureau.

Information Bureau.

Postoffice.

Commercial Exhibit.

HON. JAMES M. COX, Governor of Ohio.

MISS LULU GRAVES
President
American Dietetic Association

All general sessions, except one (at the Cincinnati General Hospital) and all joint general sessions with the American Dietetic Association and the American Hospital Conference will be held in the convention hall on this floor; also section on Hospital Administration (see Diagram B).

The executive sessions of the American Hospital Conference will be held in the Liberty Room, tenth floor, Hotel Gibson. The Old Colony Club adjoining has kindly extended the courtesies of the club to delegates attending the convention.

The Sinton Hotel is located directly across the street from the Hotel Gibson. The following meetings will be held on the ninth floor of the Hotel Sinton.

Section on Out-Patient Work, Convention Hall.

Section on Nursing, Assembly Room.

Other round-table meetings may also be arranged on this floor.

The association is fortunate this year in having a number of private dining rooms available for committee meetings and luncheon parties. On the parlor floor, Hotel Sinton, seven private dining rooms with seating capacity ranging from 25 to 125 will be found.

OTHER MEETINGS

The general session round-table discussion under the leadership of Mr. Asa Bacon will be held in the auditorium of Cincinnati General Hospital. The meeting hall for the Section on Social Service, Section on Dietetics, Section on Hospital Construction, at the Cincinnati Medical School and General Hospital will be announced in the final printed program.

Program of Papers and Discussions

Hospital war problems formed an essential part of the 1918 convention program. The call of the president, which appears on page 208 of this number, emphasizes the importance of "after-the-war" problems now confronting the hospitals. Hospitals are now passing through the "reconstruction" period. They rendered important services during the war. In some instances hospital organization was wrecked by the entrance of administrators, physicians, and nurses into the public service. Hospitals must recover and advance.

The program includes practical, every-day hospital problems which will be not only the subjects of papers but also will be considered in especially arranged round-table meetings. Other questions for discussion are—workmen's compensation, sickness and health insurance, the proper relation between hospitals and the state govern-

ments, nursing, social service, and out-patient work. Much time is to be devoted to hospital standardization considered by many as the dominant problem in the hospital mind today.

Opening Session

Although registration will begin at 3 p. m. on Monday, September 8, and arrangements have been made for an informal gathering that evening, the formal opening of the convention will take place at 10:30 on the morning of September 9. This will be a joint session with the American Hospital Association, American Hospital Conference, and American Dietetic Association, with Major C. R. Holmes, chairman of the local committee, presiding.

The address of welcome will be given by Hon. John Galvin, mayor of Cincinnati. It was expected that Hon. James M. Cox, governor of Ohio, would follow Mayor Galvin on the program but because of a conflict in dates the governor's place will be filled by another prominent speaker whose name will be announced later.

The president's address may be anticipated with considerable interest. Dr. Warner was active in advocating adoption of institutional membership and throughout the year has taken a prominent part in organizing plans for hospital standardization. Important recommendations are looked for.

Tuesday Afternoon

Three section meetings have been arranged for Tuesday afternoon; section on out-patient work, of which Mr. Michael M. Davis, Jr., director, Boston Dispensary, and nearly appointed director of the association service bureau on dispensaries and the community relation of hosptials, is chairman. Important public health problems including venereal disease clinics and health insurance are to be considered. Some of the talks are to be illustrated by lantern pictures. Speakers are to be announced.

MISS LENNA COOPER
First Vice-President American Dietetic Association.

MISS VIOLET RYLEY
Second Vice-President
American Dietetic Association

An interesting program has been arranged by Dr. L. H. Burlingham, superintendent, Barnes Hospital, St. Louis, for the section on hospital administration. Three well-known hospital administrators are participants: Dr. Joseph B. Howland, superintendent Peter Bent Brigham Hospital, Boston; Dr. A. C. Bachmeyer, superintendent Cincinnati General Hospital; and Dr. Ralph E. Seem, assistant superintendent Johns Hopkins Hospital, Baltimore. Motion pictures are to be included in the program.

Both after-the-war and practical, every-day nursing problems appear in the program of the Section on Nursing. Miss Elizabeth A. Greener, chairman, superintendent of nurses, Mount Sinai Hospital, New York, is to be congratulated upon her program. The association will be fortunate in hearing Miss Ann Strong, professor of public health nursing, Simmons College, who is to speak on "The Nursing Situation from the Public Health Point of View." "The Training of Hospital Attendants" and "The Nursing Needs of the Army" will also be discussed.

Tuesday Evening

The program for Tuesday evening is in charge of the local committee on arrangements and there will be a reception and music. A special entertainment including dancing is being arranged. An important part of the arrangements includes a special opportunity for all to inspect exhibits, on both the mezzanine and ballroom floors of the Hotel Gibson.

Wednesday, September 10

Three important and unusual meetings have been arranged for Wednesday. In the morning "Hospital Standardization" will be the general subject at a joint general meeting of the American Hospital Association and American Hospital Conference. An account of the organization of the American Hospital Conference appears on page 219. No one interested in any phase of hospital work should fail to hear the addresses by Dr. John M. Dodson, dean

MISS E. M. GERAGHTY
Secretary American Dietetics Association
New Haven Hospital, New Haven, Conn.

of Rush Medical College, Chicago, and Dr. John G. Bowman, executive secretary of the American College of Surgeons, who will speak on certain phases of hospital standards.

Wednesday Afternoon

A second joint meeting will be held in the afternoon with addresses on the same general subject. Among the speakers are Rev. Charles J. Moulinier, S. J., president of the Catholic Hospital Association, well known in the hospital world; and Miss Edna G. Henry, president American Association of Hospital Social Workers.

Wednesday Evening

The evening session has been especially arranged for state delegates, who are appointed by the governors of the forty-eight different states. It is open, however, to anyone attending the convention. The general subject for discussion is "Hospitals and the State." Two speakers are yet to be selected. Health insurance and cooperation between the hospitals and the American Red Cross are to be discussed. It is hoped that the president of the American Medical Association will be present on this occasion. Mr. Pliny O. Clark, chairman of the legislative committee, will report on "Present Relation Between Hospitals and the State Governments."

Thursday, September 11

Opportunities for recreation and play as well as work have been provided for Thursday. The local committee is arranging for a visit to the University of Cincinnati Medical School and the Cincinnati General Hospital. The ride to the hospital will be arranged to enable members and delegates to see some of the other attractions of the city. Luncheon will be served at the Cincinnati General Hospital.

Three section meetings have been arranged: section on social service, Mr. John E. Ransom, chairman, director of the Central Free Dispensary, Chicago. The section on hospital construction with Dr. George O'Hanlon, chairman, will have among the speakers, Mr. E. F. Stevens and Mr. Wm. O. Ludlow, both of whom are well known to the association; also Mr. Oliver H. Bartine, whose paper at Atlantic City was the subject of much discussion.

The section on dietetics will also hold a meeting at the Cincinnati General Hospital.

Thursday Afternoon

Special round table meeting under the direction of Mr. Asa S. Bacon, superintendent Presbyterian Hospital, Chicago, has been arranged for 3 p. m. in the auditorium of Cincinnati General Hospital. This meeting was prompted by the successful informal round-table discussion at Atlantic City which was of interest to so many delegates. Details of this meeting are to be announced.

Thursday Evening

No program of papers and discussion has been arranged for the evening. At the close of the meeting delegates will find themselves only a short distance from the world-famous Cincinnati Zoological Gardens. Admission tickets will be provided by the local committee.

Friday, September 12

Friday morning in the ballroom, Hotel Gibson, the American Dietetic Association will meet jointly with the American Hospital Association with Miss Lulu Graves, president of the American Dietetic Association, presiding. An interesting program on food and food service has been prepared.[1]

Friday Afternoon

Dr. C. C. Pierce, assistant surgeon general, U. S. Public Health Service, will address the general session of the association on "The Need for Hospital Facilities in the Venereal Disease Program." This is an important subject, discussed by a prominent public official. This address will be followed by reports of committees of the association and the election of officers.

MISS EMMA SMEDLEY
Treasurer American Dietetic Association.

1. The program of the American Dietetic Association will be found on page 221 of this issue.

FRIDAY EVENING

Contrary to custom, final adjournment will not be had until the evening. An adjournment dinner has been arranged with special program of speakers. Hon. James M. Cox, governor of Ohio, expects to be present to speak at this meeting. Detailed announcement, including plans for purchase of tickets will be made at the convention.

Entertainment

Entertainment plans by the local committee include an informal gathering and music on the evening of Monday, September 8; and a reception with music, entertainment and dancing on the evening of Tuesday, September 9. Plans for Thursday, September 11, are most attractive. There will be a ride to the Cincinnati Medical School and Cincinnati General Hospital. Opportunity to inspect both institutions will be given and luncheon will be served at the hospital. After the meeting in the afternoon, tickets will be provided for those who desire to visit the world-famous Cincinnati Zoological Gardens. No program has been made for Thursday evening, as this will enable delegates to make their own plans for one evening at least.

Contrary to the usual custom, the association is arranging, in cooperation with the local committee, an adjournment dinner. It is expected that all business of the association will have been transacted before this occasion. The dinner will be served in the ball room of the Hotel Gibson. A special program of speakers is being arranged. Announcement of plans for the purchase of tickets will be made at the convention.

Revised Program

(Final printed program, including halls assigned for meetings, will be ready for distribution at the convention.)

MONDAY, SEPTEMBER 8

AFTERNOON, 3 P. M.

Registration (Convention floor, Gibson Hotel).

EVENING

Informal gathering, music, inspection of exhibits.

TUESDAY, SEPTEMBER 9

MORNING, 10:30 A. M.

Joint General Session
(Ball Room, Gibson Hotel.)
American Hospital Association, American Hospital Conference, American Dietetic Association.

Formal Opening of the Convention, Major C. R. Holmes, presiding Chairman Local Committee on Arrangements.

Address of Welcome, Mayor of Cincinnati.

Address. Speaker to be announced.

President's Address, Dr. A. R. Warner, president.

AFTERNOON, 2 P. M.

AMERICAN HOSPITAL ASSOCIATION

Section Meetings

Section on Out-patient Work (Convention Hall, Hotel Sinton), Mr. Michael M. Davis, Jr., Chairman, Director Boston Dispensary, Boston.

Subjects for Papers and Discussions:

Clinics for Venereal Disease, Dr. Hugh Cabot, lieutenant-colonel, U. S. Army, genito-urinary surgeon, Massachusetts General Hospital, Boston.

Out-Patient and Social Service Work in Catholic Hospitals, Rev. John O'Grady, Secretary Committee on Reconstruction, National Catholic Ward Council.

Round Table discussion of points raised by members of the Section.

Section on Hospital Administration (Ball Room Gibson Hotel), Dr. Louis H. Burlingham, Chairman, Superintendent Barnes Hospital, St. Louis.

Subjects for Papers and Discussions:

Safeguarding the Hospital Milk, Dr. Joseph B. Howland, Superintendent Peter Bent Brigham Hospital, Boston, Mass.

Paper, Dr. A. C. Bachmeyer, superintendent Cincinnati General Hospital, Cincinnati, O.

Paper, Dr. Ralph E. Seem, Johns Hopkins Hospital, Baltimore.

Discussion.

Section on Nursing (Assembly Room, Hotel Sinton), Miss Elizabeth A Greener, chairman, superintendent nurses, Mount Sinai Hospital, New York.

General Topic: "The Nursing Situation of the Present Day, with Consideration of Some of Its Most Important Problems."

Readjustments which Training School and Nursing Departments of Hospitals are Facing from the Standpoint of the University Hospital, Miss Laura Logan, superintendent nurses, Cincinnati General Hospital, Cincinnati.

The Nursing Situation from the Public Health Point of View with suggestions as to a combined curriculum which shall cover necessary preparation in all branches, Miss Ann Strong, professor of puhlic health nursing, Simmons College and the Instructive District Nursing Association.

The Training of Hospital Attendants (speaker to be announced).

The Nursing Needs of the Army, Miss Amy Trench, formerly Chief Nurse of Base Hospital No. 3, A. E. F., and of Walter Reed Hospital.

Discussion.

EVENING, 8 P. M.

Reception by local committee on arrangements (Convention Hall and mezzanine floor, Gibson Hotel).

Music, entertainment, special opportunity for inspection of commercial exhibit.

WEDNESDAY, SEPTEMBER 10

MORNING, 10 A. M.

Joint General Session
American Hospital Association, American Hospital Conference
(Ball Room, Hotel Gibson.)

General Subject: "Hospital Standardization."

The Organization and Functions of a Hospital (Speaker to be announced).

Medical Education through the Visiting Staff and Interns, Dr. John M. Dodson, dean Rush Medical College, Chicago.

Better Professional Work Through a Better Staff and Better Records, Dr. John G. Bowman, executive secretary, American College of Surgeons.

AFTERNOON, 2 P. M.

Joint General Session
American Hospital Association, American Hospital Conference.
(Ball Room, Hotel Gibson.)

The Hospital's Service to Humanity, Rev. Charles J. Moulinier, S.J., president, Catholic Hospital Association.

Discussion opened by Miss Edna G. Henry, president American Association of Hospital Social Workers.

The Education of the Nurse (Speaker to be announced).

The Trustee and Layman Viewpoint (Speaker to be announced).

EVENING, 8 P. M.

Special meeting of state delegates appointed by the governors
(Ball Room, Gibson Hotel.)

General Subject: "Hospitals and the State."

Cooperation Between the Hospitals and the American Red Cross (Speaker to be announced).

Health Insurance (Speaker to be announced).

Present Relation Between Hospitals and the State Governments, Mr. Pliny O. Clark, superintendent Ohio Valley General Hospital, Wheeling, W. Va., chairman Legislative Committee, American Hospital Association.

THURSDAY, SEPTEMBER 11

MORNING, 10:30 A. M.

American Hospital Association Section Meetings at the Cincinnati General Hospital and University of Cincinnati Medical School. (Hall to be selected.)

Section on Social Service, Mr. John E. Ransom, chairman, director Central Free Dispensary, Chicago.

Subjects (Speakers to be announced):

Social Service and the Medicine of the Future.

Some Problems of Social Service in a Children's Hospital.

Medical Social Diagnosis—the Keynote of Hospital Social Work, Miss Imogene Poole, director Social Service Department, Cincinnati General Hospital.

Section on Dietetics (Hall to be selected), Miss Lulu L. Graves, chairman.

(See program of the American Dietetic Association, p. 221.)

Section on Hospital Construction. (Hall to be selected), Dr. George O'Hanlon, chairman, superintendent Bellevue Hospital, New York City.

Fire Hazard in Hospital Buildings, Extent and Remedial Measures, Mr. W. D. Crowe.

New Features of Hospital Building Equipment, Mr. E. F. Stevens.

The Building and the Patients, Mr. Wm. O. Ludlow.

In Planning a Hospital, Build with Reference to Its Future Development, Mr. Oliver H. Bartine.

Discussion by Miss Jean A. Hunter, superintendent Grace Hospital, New Haven, Conn.

Department Discussion of Heat, Light, and Power Costs, Mr. D. D Kimball, Dr. H. M. Pollock.

12:30 M.

Luncheon at Cincinnati General Hospital.

AFTERNOON, 3 P. M.

General Session American Hospital Association.
(Auditorium Cincinnati General Hospital.)

Special round table meeting under direction of Mr. Asa Bacon, superintendent Presbyterian Hospital, Chicago.

Program to be announced.

EVENING

No program of papers and discussions. The Cincinnati General Hospital and the University of Cincinnati Medical School are only a short distance from the world's famous Zoological Gardens. Admission tickets to the Gardens will be provided by the local committee on arrangements, after adjournment.

FRIDAY, SEPTEMBER 12

MORNING, 10 A. M.

Joint General Session
American Hospital Association, American Dietetic Association.
(Ball Room, Hotel Gibson.)

Miss Lulu Graves, president American Dietetic Association, presiding.

The Dietitian in a Hospital Dispensary, Miss Bertha Wood, Boston Dispensary, Boston, Mass.

What We Have Learned in Dietetics from the Army, Lieut.-Col. J. R. Murlin, M.C.; Hospital Food Waste, Lieut.-Col Ernest E. Irons, M.C., formerly Commandant Base Hospital, Camp Custer.

AFTERNOON, 2 P. M.

General Session American Hospital Association.
(Ball Room, Hotel Gibson.)

The Need for Hospital Facilities in the Venereal Disease Program, Dr. C. C. Pierce, assistant Surgeon General, U. S. Public Health Service.

Report of Committees.

Election of officers.

Other business of the Association.

EVENING, 7:30 P. M.
General Session American Hospital Association.
(Ball Room, Hotel Gibson.)
Adjournment Dinner. Special program of speakers.
The Hon. James M Cox, Governor of Ohio, expects to be present and speak at this meeting.

Hotel Headquarters and Reservations

The Hotel Gibson is headquarters for convention activities of all three associations. General sessions, section meetings, non-commercial exhibit, commercial exhibit, architect's exhibit will be held in this hotel. Section meetings will be held, also, in the Sinton Hotel, directly across the street, and several section meetings will take place at the University of Cincinnati Medical School and at the Cincinnati General Hospital. Both hotels cooperate most heartily in their efforts to accommodate the convention and provide for the care of guests.

Pictures of both hotels appear elsewhere as well as diagrams showing meeting halls and rooms, location of the various exhibits, registration and information bureaus.

Hotel Rates

The following schedule of rates at both hotels is published again for the convenience of members and delegates. The July number contained a list of other hotels available and their rates. Members and delegates planning to attend the convention should not delay making reservations. The office of the association does not make hotel reservations. *Communications on this subject should be sent to the hotels direct.*

HOTEL GIBSON

"Single rates"—
$2.00, $2 50. $3.00, $3.50, $4.00, $5.00
"Double rates"—
$3.50, $4.00, $4.50, $5.00, $5.50, $6.00 and $7.00
All rooms have private bath, either shower, tub, or combination tub and shower.
Large rooms that will accommodate five to eight persons, single bed for each person, with private bath—$2.00 per person.

HOTEL SINTON

OUTSIDE ROOMS

One person—	
Room with bath	$3.50 to $ 6.00
Two persons—	
Room with bath	$4.50 to $ 7.00
Room with bath and twin beds	$5.00 to $10.00
Two connecting rooms, bath between	$7.00 to $10.00
Three persons—	
Two connecting rooms, bath between	$8.00 to $12.00
Two connecting rooms, bath between, one with twin beds	$10.00
Four persons—	
Two connecting rooms, bath between	$9.00 to $12.00
Two connecting rooms, bath between, one or both with twin beds	$12.00

COURT ROOMS

One person—	
Room with bath	$2.50 to $3 00
Room without bath	$2.00 to $2.50
Two persons—	
Room with bath	$3.50 to $4 00
Room with bath and twin beds	$5 00
Room without bath	$3.00 to $3.50
Three persons—	
Two connecting rooms, bath between	$6.00 to $7.00
Two connecting rooms, one with bath, one with twin beds	$8.00
Four persons—	
Two connecting rooms, bath between	$7.00 to $8.00
Two connecting rooms ,both with bath, one with twin beds, but outside rooms	$11.00

CORNER SUITES

Parlor, bedroom, and bath	$10.00 to $15.00
Parlor, dining room, bedroom, and bath	$25.00 to $30 00

Additional bedrooms may be connected with the ten to fifteen dollar suites.
The hotel is conducted entirely upon the European plan. All rooms without private bath have lavatory with hot and cold water and free use of detached bath. When requesting reservation, it is important to state the number for whom accommodation is desired, the kind of rooms preferred, the date, and if possible, the hour of arrival.

Special Accommodations

Special arrangements are being made for the care and comfort of Catholic Sisters attending the convention. Sister Superior Victoria, Good Samaritan Hospital, who is a member of the Local Committee on Arrangements, will assist in making arrangements for Sisters attending the convention from the various parts of the country. Sisters planning to attend should communicate with Sister Victoria direct. It is expected that a special communication on this subject will be sent out to the Catholic Hospitals by the local committee.

Special Garage Facilities for Motor Parties

Arrangements have been made with the Citizen's Motor Car Company to take care of all automobile parties expecting to reach the convention city by motor. This garage, one of the largest in Cincinnati, is located at the corner of Seventh and Main Streets, just three blocks from the Hotel Gibson and Hotel Sinton.

Storage charges at this garage are 75 cents for 12 hours or less, $1.25 for from 12 to 18 hours, $1.50 for from 18 to 24 hours. These charges include besides storage such ordinary services as air in tires, water in radiator and the like. An extensive repair department is also conducted by this garage which would be available for those who would need major repairs.

Charges for repairs are in line with other parts of the country.

Special Convention Railway Rates

The August bulletin announced that special transportation rates have been allowed by the Railroad Administration to the delegates attending the convention. After this announcement was made, word was received that the Railroad Administration had rescinded its order. This is most unfortunate as the delegates would have been allowed round trip to the convention at the rate of fare and one-third. Such concessions have been granted organizations similar to the American Hospital Association. Officials of the Association and members of the Cincinnati Convention Board are still working for the rate with the Railroad Administration. *If the concession is granted, a special communication will be mailed direct to all members of the association and all others concerned in attending the convention.*

Commercial Exhibit

Great pains have been taken to provide a large and unusually attractive commercial exhibit. The space allotted the American Dietetic Association for this purpose on the mezzanine floor is being utilized as a food and food-service exhibit (see Diagram A, Hotel Gibson).

Demand for space assigned by this association for commercial exhibit purposes (see Diagram B, Hotel Gibson) has been so great that it has been necessary to utilize rooms set aside for other purposes.

Exhibit halls will be open from 8 a.m. to 6 p.m., and during those evenings when the association is in session. Special arrangements have been made for the inspection of exhibits on the evenings of September 8 and 9.

The secretary urges members of the association to take advantage of this exhibit. Hospital buyers will find it to their advantage to patronize exhibitors at the convention.

Non-Commercial Exhibit

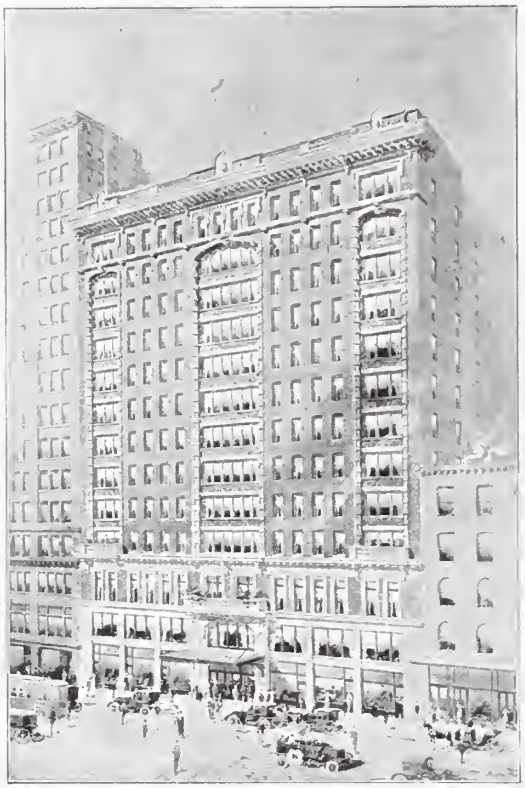
The non-commercial exhibit is being arranged by a special local committee, the chairman of which is Miss Alice Thatcher, superintendent of Christ Hospital, Cincinnati. Announcement of the bulletin sent to institutional members and other institutions was made in the August number of THE MODERN HOSPITAL. The committee hopes to arrange an attractive exhibit including among other things the following:

1. Hospital pictures of interest showing both exterior and interior of hospital.
2. Interesting reports and hospital forms and records.
3. New or original hospital devices or apparatus.
4. Economies promoted.
5. Exhibits of forms, reprints and other literature.

The exhibit will be located on the mezzanine floor, Hotel Gibson (see diagram).

Architects' Exhibit

Plans for the architects' exhibit under direction of Dr. John A. Hornsby, special secretary of the association, were announced in the August number. A number of architects have been invited to make exhibits of hospital



Hotel Gibson, where most of the sessions will be held.

plans and to take part in informal discussions on hospital construction. This exhibit, including informal talks and the interesting program of the section on hospital construction, should prove to be of especial interest and value to hospital people. Since the signing of the armistice there seems to be new activity in hospital building regardless of the increased cost of labor and materials. This exhibit will be located in room D, mezzanine floor (see Diagram A).

Institutional Membership

The institutional membership plan was adopted by the association at the 1918 convention. The general approval of the plan at the convention and the response to communications on the subject during the year have been gratifying. The association now has 180 institutional members and applications from a number of other hospitals are expected shortly. A complete list of such members appears on page 215.

Institutional membership has raised in the minds of many hospital people the question: What service are the hospitals going to get for institutional membership? This question was anticipated by officials of the association and has resulted in the adoption of the general policy to establish service bureaus as fast as the finances of the association will permit. Announcement of this policy has already been made in THE MODERN HOSPITAL. The Service Bureau on Dispensaries and the Community Relation of Hospitals has been decided upon. Other service bureaus under consideration are: (1) Hospital Construction; (2) Hospital Accounting; (3) Legislative Service Bureau. Recommendations will undoubtedly be made regarding these at the convention. The second announcement as to the Bureau on Dispensaries and the Community Relations of Hospitals follows.

Service Bureau on Dispensaries and the Community Relations of Hospitals

The Board of Trustees of the American Hospital Association, at a meeting on April 25, 1919, approved the establishment of a service bureau on dispensaries and the community relations of hospitals, and authorized the president and secretary to proceed with arrangements to make this plan effective.

Mr. Michael M. Davis, Jr., director of the Boston Dispensary and chairman of the Committee on Dispensary Work of the American Hospital Association, has been requested to become director of this bureau, and to give a definite portion of his time during the coming season to this work. It will be the aim of the bureau to offer practical service to members of the American Hospital Association along the following lines:

1. Advice and recommendations by correspondence, or by personal service as consultant, concerning the construction, organization or management of dispensaries or outpatient departments.

2. Studies or surveys of the needs of particular communities or districts for hospital or dispensary service and concerning the relation between hospitals and local financial support, or the public health and social work of the community.

The bureau will prepare and circulate, through the office of the American Hospital Association, such studies, reports and other literature as would appear to be of practical value.

The service of the bureau will be free to members of the American Hospital Association, except that where personal consultation is required the traveling and other expenses of the consultant must be paid by the organization receiving the service. Non-members of the association will be charged reasonable fees.

Meeting of the Legislative Committee

Important legislative problems were considered by the legislative committee at its meeting in Cleveland on June 27. It was agreed that the report of the legislative committee at the convention should contain definite recommendations for the immediate development of the legislative work of the association on a larger scale. The secretary was instructed to draft a bill for Federal incorporation of the association and submit it to the trustees for approval; also to keep hospitals of the association informed so far as possible of certain important public health legislation now pending in Congress. Reports on public health legislation of particular interest to hospitals passed by recent state legislatures were discussed and it was the opinion of the committee that the association should take important steps to urge hospitals in the various states to become more active in legislative matters.

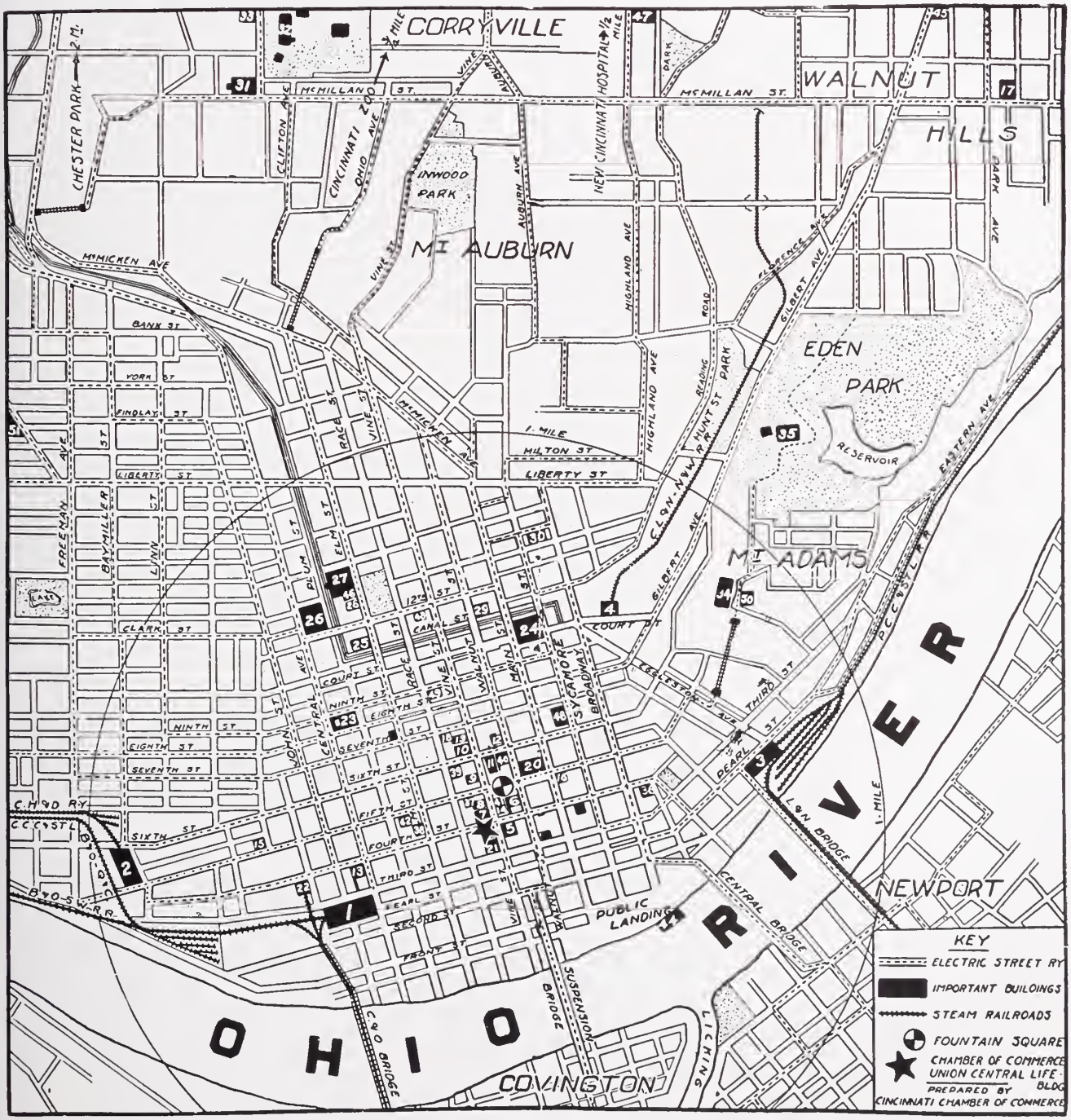
The important provisions of Senate Bill 18, providing for the promotion of vocational rehabilitation of persons disabled in industry, were discussed. It was pointed out that the Federation Board for Vocational Education was authorized to cooperate within the provisions of the Act with public and private agencies which, of course, includes hospitals. It was emphasized that hospitals have an obligation to urge that the provisions of the Act be accepted by legislative action in the various states, or, pending the convening of the state legislatures, by the governor.

The secretary was instructed to ascertain if it is intended in the Federal dry enforcement bills to eliminate the use of whiskey for medicinal purposes in hospitals; and second, if not, is it possible for hospitals having need of whiskey for medicinal purposes to obtain it tax free as they now secure alcohol. The secretary is now in communication with the Internal Revenue Commissioner and will inform hospitals on this point.

The 1918 proceedings have been mailed to institutional and personal members. Members not receiving copies are requested to notify the executive secretary.

Institutional Members

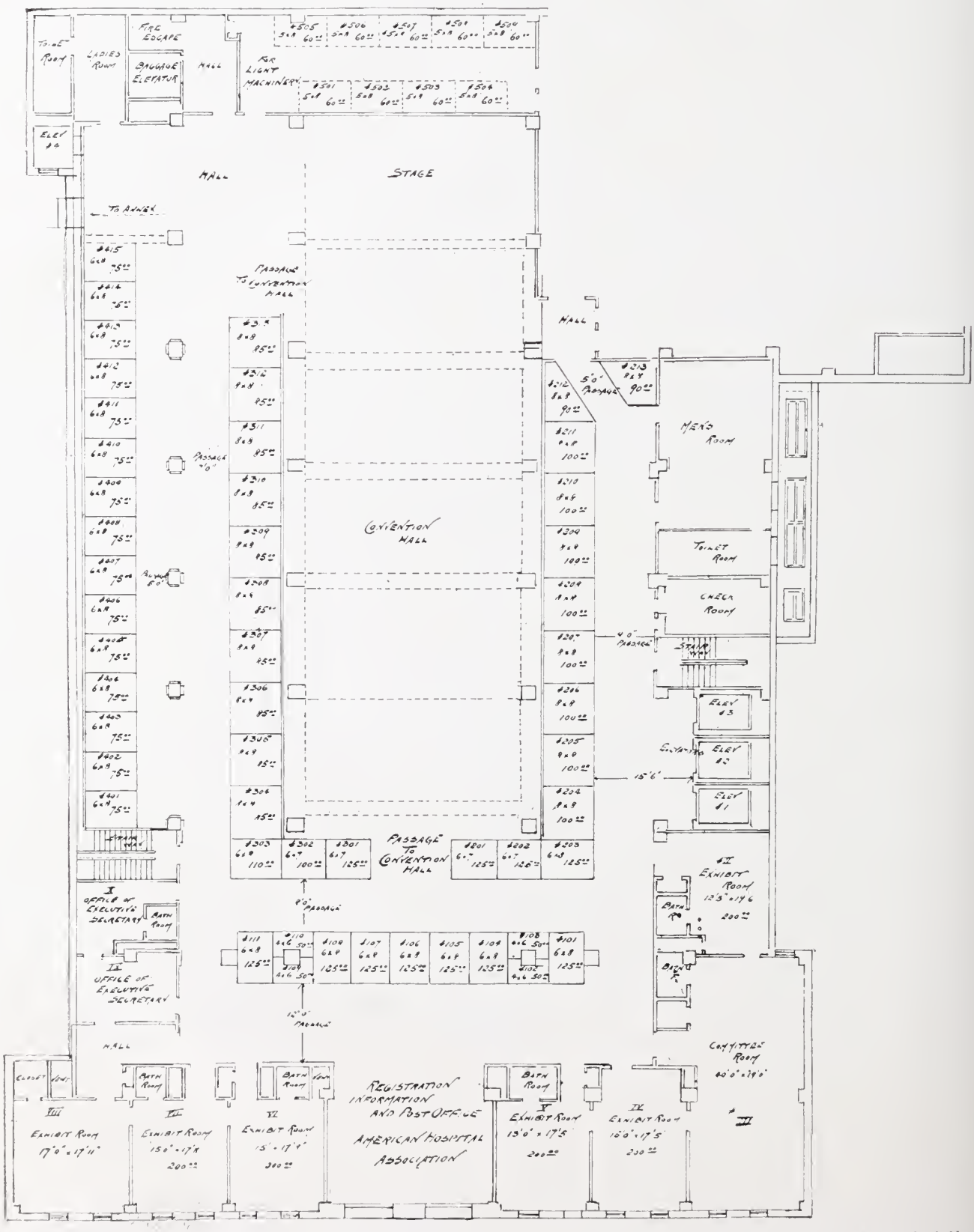
All Saints Hospital, Fort Worth, Tex.
Alliance City Hospital, Alliance, O.
Anna Jaques Hospital, Newburyport, Mass.
Ashtabula General Hospital, Ashtabula, O.
Baird-Dulaney Hospital, Dyersburg, Tenn.
Barnes Hospital, 600 S. Kingshighway, St. Louis.
Boston Dispensary, 25 Bennett St., Boston.
Binghampton City Hospital, Binghampton, N. Y.



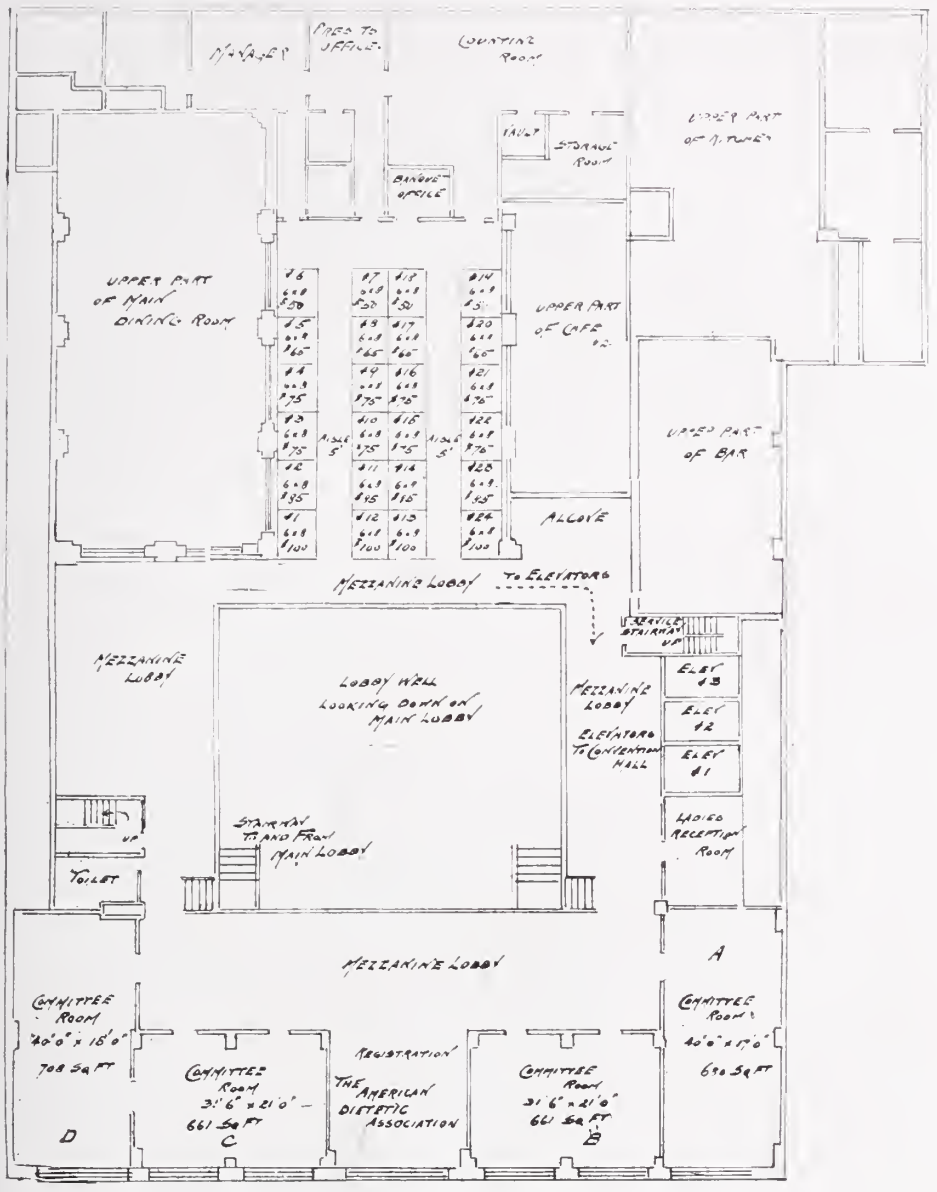
Map of the City of Cincinnati

	No.
Central Union Depot	1
Court Street Depot	4
Fourth Street Depot	22
Pennsylvania Depot	3
Alms Hotel	17
Dennison Hotel	16
Grand Hotel	13
Havlin Hotel	9
Honing Hotel	41
Hotel Emery	8
Hotel Gibson (Headquarters)	6
Hotel Sinton	5
Lackman Hotel	7
Metropole Hotel	12
Oxford Hotel	39
Palace Hotel	10
Princeton Hotel	38
Rand Hotel	37
Savoy Hotel	11
Stag Hotel	14
Art Museum and Art School	35
College of Music	46
Conservatory of Music	47
Guilford School	36
Hebrew Union College	33
Hughes High School	31
Lane Seminary	45
Ohio Mechanics Institute (Emery Auditorium)	29
St. Xavier's College	48
University of Cincinnati	32
Woodward High School	30
Cincinnati Baseball Park (Redland Field)	49 51
City Hall	23
Court House	24
Coney Island Landing	44
Hamilton County Memorial Hall	28
Music Hall	27
New Y. M. C. A.	25
Old Hospital	26
Post Office	20
Public Library	19
Rookwood Pottery	34
Sterling Glass Work	50

Braddock General Hospital, Braddock, Pa.
Broad Street Hospital, Oneida, N. Y.
Brockton Hospital, Brockton, Mass.
Brinkley-Jones Hospital Assn., Milford, Kan.
Bronson Hospital, Kalamazoo, Mich.
Central Free Dispensary, 1744 W. Harrison St., Chicago.
Children's Hospital, Philadelphia.
Children's Free Hospital, Detroit.
Charity Hospital, Norristown, Pa.
Cherrington Hospital, Logan, O.
Children's Homeopathic Hospital, Philadelphia.
City Hospital, Columbus, Ga.
City Hospital, Bellaire, O.
City Hospital, Akron, O.
City and County Hospital, St. Paul.
Columbia Hospital, 929 Maryland Ave., Milwaukee
Cincinnati Sanitarium, Cincinnati.
Clearfield Hospital, Clearfield, Pa.
Cleveland Homeopathic Hospital, Cleveland.
Corry Hospital Assn., Corry, Pa.
Cottage State Hospital, Philipsburg, Pa.
Easton Hospital, Easton, Pa.
Edgecombe General Hospital, Tarboro, N. C.
Elkins City Hospital, Elkins, West Va.
Englewood Hospital Association, Chicago.
Eye, Ear, Nose and Throat Infirmary, 1945 Fifth Ave., Pittsburgh.
Episcopal Hospital for Children, Cincinnati.
Faulkner Hospital, Jamaica Plains, Boston.
Foote Memorial Hospital, Jackson, Mich.
Franklin Square Hospital, Baltimore.
Fremont Hospital, Fremont, Neb.
Garretson Hospital, Philadelphia.
Gartley-Ramsay Hospital, 696 Jackson Ave., Memphis, Tenn.



Ground floor and ballroom of the Hotel Gibson where the commercial exhibit of the American Hospital Association meeting is to be held.



Mezzanine floor of the Hotel Gibson, where the commercial exhibit of the American Dietetic Association is to be held.

General Hospital, Saranac Lake, N. Y.
German Evan. Deaconess Hospital, Chicago.
Good Samaritan Hospital, Zanesville, O.
Grace Hospital, Detroit.
W. C. Graham Protestant Hospital, Keokuk, Ia.
Hackensack Hospital, Hackensack, N. J.
Hackley Hospital, Muskegon, Mich.
Hahnemann Hospital, New York.
Harper Hospital, Detroit, Mich.
Hebrew Hospital, Baltimore.
Henry Heywood Memorial Hospital, Gardner, Mass.
Highland Park Municipal Hospital, Highland Park, Mich.
Hillsboro Hospital, Hillsboro, Wis.
Hoffman Hospital, Keyser, W. Va.
Hospital of Women's Medical College, Philadelphia.
Hospital for Deformities and Joint Diseases, New York City.
Howard Hospital, Philadelphia.
Hurley Hospital, Flint, Mich.
Jewish Hospital, St. Louis.
Johns Hopkins Hospital, Baltimore.
John N. Norton Memorial Infirmary, Louisville, Ky.
Kensington Hospital for Women, Philadelphia.
Knickerbocker Hospital, New York City.
Lakeside Hospital, Cleveland.
The Lankenau Hospital, Philadelphia.
Lawrence and Memorial Hospital, New London, Conn.
Lima Hospital Society, Lima, O.
Louisville City Hospital, Louisville, Ky.
Lubbock Sanatarium, Lubbock, Texas.
Lutheran Hospital, Brooklyn, N.Y.
Malden Hospital, Malden, Mass.
Martins Ferry Hospital, Martins Ferry, O.
Mary Hitchcock Memorial Hospital, Hanover, N. H.
Mary Thompson Hospital, Chicago
Massillon Hospital Assn., Massillon, O.
Mayo Clinic, Rochester, Minn.
Memorial Hospital, Pawtucket, R.I.
Mercy Hospital, Chicago.
Mercy Hospital, Toledo, O.
Mercy Hospital, Pittsburgh, Pa.
Mercy Hospital, Grayling, Mich.
Metropolitan Life Ins. Co. Sanitarium, Mt. McGregor, N. Y.
Miami City Hospital, Miami, Fla.
Middlesex General Hospital, New Brunswick, N. J.
Michael Reese Hospital, Chicago.
Milwaukee Children's Hospital, Milwaukee.
Milwaukee Infants' Hospital, Milwaukee.
Monmouth Memorial Hospital, Long Branch, N. J.
Montefiore Home, New York.
Moody Hospital, Dothan, Ala.
Mt. Sinai Hospital, Milwaukee.
Nashua Memorial Hospital, Nashua, N. H.
Nathan-Litauer Hospital, Gloversville, N. Y.
Nathan-Miriam Barnet Memorial Hospital, Paterson, N. J.
New England Deaconess Hospital, Boston, Mass.
New England Baptist Hospital, Boston, Mass.
Newark Beth Israel Hospital, Newark, N. J.
Newell & Newell Sanitarium, Chattanooga, Tenn.
New York Nursery and Child's Hospital, New York.
New York Post-Graduate Med. Sch. & Hosp., New York City.
Norton Memorial Infirmary (See John N. Norton Mem. Inf.)
Norwegian American Hospital, Chicago.
O. E. Jones General Hospital, Jamestown, N. Y.
Ohio Valley General Hospital, Wheeling, W. Va.
Oil City Hospital, Oil City, Pa.
Olean General Hospital, Olean, N. Y.
Painesville Hospital Association, Painesville, O.
Park Avenue Hospital, Rochester, N. Y.
Passavant Memorial Hospital, Chicago.
Pennsylvania Hospital, Philadelphia.
Physicians' and Surgeons' Hospital, Corsicana, Texas.
Pittston Hospital, Pittston, Pa.
Presbyterian Hospital, Chicago.
Presbyterian Hospital of New Orleans, New Orleans.
Presbyterian Hospital, Newark, N. J.
Presbyterian Hospital, New York.
Protestant Deaconess Hospital, Evansville, Ind.
Provident Hospital, Chicago.
Research Hospital, Kansas City, Mo.
Robert Packer Hospital, Sayre, Pa.
Rochester General Hospital, Rochester, N. Y.
Rochester Homeopathic Hospital, Rochester, N. Y.
Roper Hospital, Charleston, S. C.
Saginaw General Hospital, Saginaw, Mich.
Santa Filomena Sanatorium, San Francisco.
Scandinavian Hospital, Iron Mountain, Mich.
Scotia Hospital Assn., Scotia, Cal.
Sherman Hospital, Elgin, Ill.
Sherman Hospital, Sherman, Tex.
Springfield Hospital, Springfield, Mass.
South Side Hospital, Pittsburgh.
South Chicago Hospital, Chicago.
South San Francisco Gen. Hospital, South San Francisco, Cal.
Somerset Hospital, Somerville, N. J.
Staten Island Hospital, Tompkinsville, S. I., N. Y.
Stuart Circle Hospital, Richmond, Va.
Swedish Hospital, Minneapolis.
Swedish Mission Hospital, Omaha, Nebr.
St Albans Hospital, St. Albans, Vt.
St. Agnes Hospital, Raleigh, N. C.
St. Elizabeth's Hospital, Youngstown, O.
St. Francis Hospital, Pittsburgh.
St. Joseph's Hospital, Lancaster, Pa.
St. Joseph's Hospital, Aberdeen, Wash.
St. Luke's Hospital, San Francisco.
St. Luke's Hospital, New Bedford, Mass.
St. Luke's Hospital, N. Broadway, Philadelphia.
St. Luke's Hospital, Davenport, Ia.
St. Mary's Hospital (Corporation), Waterbury, Conn.
St. Mark's Hospital, Salt Lake City, Utah.
St. Vincent Charity Hospital, Cleveland.
Texas Baptist Memorial Sanitarium, Dallas, Texas.
Theda Clark Memorial Hospital, Neenah, Wis.
Toole General Hospital, Toole, Utah.
Union Hospital, Fall River, Mass.
University Hospital, Boulder, Col.
University of California Medical School and Hospitals, San Francisco.
Vincent Memorial Hospital, Boston, Mass.
Vancouver General Hospital, Vancouver, B. C.
Warren General Hospital, Warren, Pa.
West Philadelphia Hospital for Women, Philadelphia, Pa.
Warren City Hospital, Warren, O.
Watts Hospital, West Durham, N. C.
West Suburban Hospital, Oak Park, Ill.
Wheatley Provident Hospital, Kansas City, Mo.
Wilkes-Barre City Hospital, Wilkes-Barre, Pa.
Winnipeg General Hospital, Winnipeg, Canada.
Woman's Hospital, New York.
Woman's Hospital, Detroit, Mich.
Woman's Southern Homeopathic Hospital, Philadelphia.
Worcester Hahnemann Hospital, Worcester, Mass.
Youngstown Hospital Association, Youngstown, Ohio.

Longview Hospital, situated in one of the most beautiful suburbs of Cincinnati.

Delegates Appointed by the Governors*

Idaho—Dr. Wm. F. Smith, president, Idaho Medical Association, Boise; Dr. Ed. Maxey, secretary, Idaho Medical Association, Boise; Dr. J. N. Alley, Lewiston; Dr. O. B. Steely, Pocatello; Dr Ray H. Fisher, Rigby; Dr. W. H. King, Montpelier; Mrs. J. O. Athey, Boise; Mrs. E. R. Bennett, University Extension Service, Boise; Miss Gertrude Cragin, school nurse, Boise; Miss Sarah Smith, superintendent St. Luke's Hospital, Boise.

Virginia—Dr. Beverly R. Tucker, 212 W. Franklin St., Richmond; Dr. E. H. Henderson, superintendent Southwestern State Hospital, Marion; Dr. W. F. Drewry, superintendent Central State Hospital, Petersburg; Dr. S. S. Gale, Lewis-Gale Hospital, Roanoke; Mr. Frederick Morlok, superintendent Memorial Hospital, Richmond; Dr. Max Gwathmey, St. Christopher's Hospital, Norfolk.

Kansas—Dr. W. O. Thompson, Dodge City; Dr. E. E. Norrison, Great Bend; Dr. W. S. Basham, Wichita; Dr. H. L. Snyder, Winfield; Dr. W. M. C. Lathrop, Norton; Dr. John L. Grove, Newton; Dr. H. L. Munn, Topeka; Dr. P. S. Mitchell, Iola; Dr. M. T. Siedler, Rosedale; Dr. Samuel Murdock, Jr., Sabetha; Dr. M. L. Perry, Topeka; Dr. Benjamin F. Morgan, Clay Center.

Georgia—Mr. Steve R. Johnson, superintendent, Grady Hospital, Atlanta; Dr. Joseph Bradfield, superintendent, Battle Hill Sanitarium, Atlanta; Dr. R. M. Harbin, Rome; Dr. A. H. Hilman, Albany; Dr. George R. White, Savannah; Dr. William Doughty, Augusta; Dr. E. C. Davis, Davis-Fisher Sanitarium, Atlanta; Dr. W. C. Lyle, Candler Bldg., Atlanta; Dr. W. H. Goodrich, Augusta.

Indiana—Dr. Charles P. Emerson, dean Indiana University School of Medicine, Indianapolis; Dr. Charles E. Woods, superintendent, Methodist Episcopal Hospital, Indianapolis; Miss Edith Willis, superintendent, Good Samaritan Hospital, Vincennes; Mrs. James B. Wilson, president, Bloomington Hospital, Bloomington; John L. Rupe, president, Reid Memorial Hospital, Richmond; Dr. Harry L. Foreman, superintendent, Indianapolis City Hospital, Locke and Margaret Sts., Indianapolis; Mrs. Ethel P. Clark, superintendent of nurses, Robt. W. Long Hospital, Indianapolis; Miss Anna Melendorp, superintendent of nurses, Home Hospital, Lafayette; Miss Clara Pound, superintendent of nurses, Reid Memorial Hospital, Richmond; Miss Edna Humphrey, inspector of training schools for nurses, Crawfordsville; Dr. H. J. Morgan, secretary City Board of Health and Charities, Indianapolis; Miss Elizabeth Springer, superintendent of nurses, Huntington County Hospital, Huntington; Dr. G. R. Andrews, superintendent, Home Hospital, Muncie; Dr. Alfred G. Henry, president, Marion County Anti-Tuberculosis Society, Indianapolis; Dr. T. N. Hurty, secretary, State Board of Health, Indianapolis; Dr. W. F. King, assistant secretary, State Board of Health, Indianapolis; Dr. Hugh Cowing, president, State Board of Health, Muncie.

Maryland—Dr. J. McFadden Dick, Salisbury; Dr. Henry M. Hurd, 1003 St. Paul St., Baltimore; Miss Jane Nash, superintendent, Church Home and Infirmary, Broadway and Fairmont Ave., Baltimore; Miss Sargent, superintendent of nurses, Sheppard and Enoch Pratt Hospital, York Road near Towson, Baltimore; Mr Sewall Watts, Marvland General Hospital, Baltimore; Hon. Henry D. Harlan, president, Board of Johns Hopkins, Baltimore; Col. Winford H. Smith, superintendent, Johns Hopkins Hospital, Baltimore; Dr. J. M. H. Rowland, dean, University of Maryland, corner Lombard and Green Sts., Baltimore; Dr. P. Wroth, Hagerstown; Miss Sampson, Womans Hospital, Baltimore; Miss Ball, Union Protestant Infirmary, 1914-30 Division St., Baltimore; Dr. Brice W. Goldsborough, Cambridge; Dr. Thomas Johnston, Frederick; Dr. Howard Bratton, Elkton; Dr. J. Whitridge Williams, dean, Johns Hopkins Medical School, Baltimore; Miss Marie Gorter, care Judge Gorter, 617 St. Paul St., Baltimore; Col. William H. Welch, Maryland Club, Charles and Eager Sts., Baltimore; Gen. Francis E. Waters, Maryland Council of Defense, 703 Union Trust Bldg., Baltimore.

Mississippi—Dr. C. D. Mitchell, Fondren; Dr. T. F. Elkin, Tupelo; Dr. L. L. McDougal, Booneville; Dr. J. H. McNiell, Olive Branch; Dr. S. E. Eason, New Albany; Dr. T. W. Reagan, Union; Dr. W. H. Watson, Brandon; Dr S. W. Glass, Lyon; Dr. H. F. Garrison, Seminary; Dr. R. L. Crawford, Tylertown; Dr. R. H. Cranford, Laurel; Dr. A. J. Ware, Greenville; Dr. Willis Walley, Jackson; Dr. M. J. L. Hoye, Meridian; Dr. G. Y. Hicks, Vicksburg; Dr. W. W. Crawford, Hattiesburg; Dr. R. W. Hall, Jackson; Dr. Irene Fatheree, Jackson; Dr. R. D. Sessions, Natchez; Dr. Hugh Gamble, Greenville; Dr. V. P. Philpot, Houston; Dr. H. M. Folkes, Biloxi; Dr. G. M. Street, Vicksburg; Dr. Henry Boswell, Magee.

New York—Andrew D. Morgan, State Hospital Com., Albany; Dr. Matthias Nicoll, Jr., State Health Dept., Albany; Dr. Charles W. Pilgrim, Hudson River State Hospital, Poughkeepsie; Dr. Seymour Oppenheimer, 45 East 60th St., New York City; Dr. Joseph H. Larocque, 66 Oak St., Plattsburgh.

Ohio—Dr. A. W. Freeman, State Commissioner of Health, Columbus; Dr. C. E. Sawyer, Marion; Mr. R. E. Miles, director, Institution for Public Efficiency, Columbus; Dr. Maurice Freiberg, Jewish Hospital, Cincinnati; Rev. Father C. H. LeBlond, 505 O'Brien Bldg., Cleveland; Miss Mary A. Jamieson, Grant Hospital, Columbus.

Texas—Dr. C. W. Goddard, Austin; Dr. Oscar Davis, Austin; Dr. Jno. N. Holt, Houston; Dr. Alva W. Karnes, Dallas; Dr. Webb Walker, Ft. Worth; Dr. J. Forsythe Rowe, Waco; Dr. W. B. Russ, San Antonio.

West Virginia—Dr. H. D. Hatfield, Huntington; Dr. L. V. Guthrie, Huntington; Dr. C. F. Hicks, Welch; Dr. Pliny O. Clark, Wheeling; Dr. H. L. Goodman, Thayer; Dr. T. K. Oates, Martinsburg; Dr. C. S. Hoffman, Keyser; Dr. C. M. Ramage, Fairmont; Dr. W. J. Davidson, Parkersburg; Dr. Geo. J. E. Sponseller, Martinsburg.

Illinois—Mr. M. L. Harris, Henrotin Hospital, Chicago; Dr. John H. Franklin, chief of staff, Spring Valley Hospital, Spring Valley; Dr. Carl O. Meyer, assistant warden, Cook County Hospital, Chicago; Dr. George T. Weber, superintendent, Olney Sanitarium, Olney; Rev. Joseph T. Straub, superintendent, St. John's Hospital, Springfield; Miss Edna Foley, superintendent, Visiting Nurses Association, 104 S. Michigan Ave., Chicago; Mr. Pearl Ringland, superintendent, Blessing Hospital, Quincy; Dr. C. O. Young, treasurer, Chicago-Cook County Hospital Assn., Chicago; Dr. H. V. Pettit, superintendent, The Ottawa Tuberculosis Colony, Ottawa; Dr. John E. Ransome, superintendent, Central Free Dispensary, 1744 W. Harrison St., Chicago; Dr. Josephine Milligan, Jacksonville; Mrs. Elizabeth Barnhart, supervising nurse, King's Daughters Nursing Service, Moline; Mrs. Ira Couch Wood, chairman, Child Welfare Dept. Women's Committee Council of National Defense, Tower Bldg., Chicago; Miss Charlotte Todd, supervising nurse, East St. Louis, Ill.; Miss Ella Wheeler, supervising nurse, Danville; Miss Bena M. Henderson, superintendent, Children's Memorial Hospital, 735 Fullerton Ave., Chicago; Miss Nellie C. Batter, supervising nurse, Waukegan; Miss Harriett Fulmer, superintendent, Cook County Rural Nursing Service, City Hall, Chicago; Mr. Charles H. Thorne, director, Department of Public Welfare, Springfield; Dr. C. St. Clair Drake, director of Public Health, Springfield; Dr. John Dill Robertson, commissioner of Health, Chicago; Dr. E. H. Best, health officer, Freeport; Dr. Ira C. Harman, health officer, Chicago Heights; Dr. Edmund W. Weis, superintendent, Hygienic Institute, La Salle; Dr. Clarence T. Roome, commissioner of Health, Evanston; Dr. Frederick G. Hall, health officer, Galesburg; Dr. J. M. Furstman, health officer, Bloomington; Dr. I. H. Neece, health officer, Decatur.

*Delegates from other states on adv. page 68.

The Deaconess Hospital, founded in 1888 by the Deaconess Society.

THE AMERICAN HOSPITAL CONFERENCE

Its Origin, Plans and Tentative Program of the Cincinnati Meeting—Constituent Organizations—A Democratic Constitution

On April 21, 1919, a conference was called in Chicago to consider the problem now generally designated as "Hospital Standardization," by Dr. Arthur Dean Bevan, president of the American Medical Association, in accordance with the following resolution adopted at the fifteenth annual conference of the Council on Medical Education, March 3, 1919. The resolution followed the reading and discussion of a paper on this subject presented by Dr. A. R. Warner, president of the American Hospital Association. Dr. Warner presented the resolution. It was as follows:

"Resolved, That it is the consensus of opinion of the members of this Conference that the apparent agreement on the subject of hospital standardization, as expressed in this meeting, should be utilized to expedite progress on this problem. To that end it is the consensus of opinion of this Conference that the American Medical Association be asked to take the leadership in formulating a committee, representing all interested factors, which shall give this subject of hospital standardization such consideration and study as is possible, and that the American Medical Association, together with this committee, arrange to call a meeting of all those interested in and affected by hospital standardization at some convenient point and time within the next year."

The Cincinnati Tuberculosis Sanatorium.

The conference on April 21 was composed of delegates from national organizations more directly interested in hospital work. After a full day's discussion of the problem at hand and means and possible methods of meeting it, a resolution was adopted that there be formed an organization to be known as the American Hospital Conference to be composed of two representatives, each, from the following twelve organizations:

American College of Surgeons.
American Medical Association.
American Nurses' Association.
American Hospital Association.
Association of American Medical Colleges.
Federation of State Medical Boards of the United States.
American Association of Hospital Social Workers.
Catholic Hospital Association of the United States and Canada.
American Association of Industrial Physicians and Surgeons.
Medical Departments of the United States Army, Navy and Public Health Service.

By a second resolution it was decided that there should be an Executive Council of the American Hospital Conference to complete the organization and arrange program for the first meeting. The council selected by the conference were the following:

Dr. A. R. Warner, president, American Hospital Association, Cleveland, chairman.

Dr. W. L. Bierring, secretary, Federation of State Medical Boards of the United States, Des Moines, Iowa.

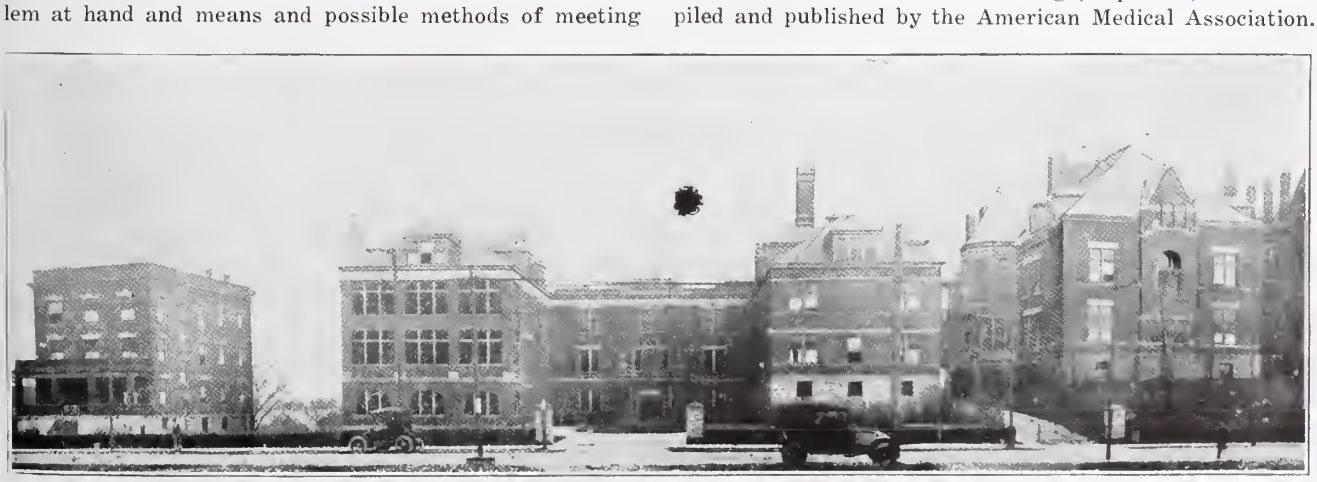
Dr. John M. Dodson, acting chairman, Council on Medical Education of the Council on Medical Education of the American Medical Association, Chicago.

It was also decided that the first meeting of the conference should be held in conjunction with the annual meeting of the American Hospital Association at Cincinnati in September, 1919.

At the adjournment of the conference in Chicago, April 21, the leadership of the American Medical Association in the affairs of the American Hospital Conference as provided in the resolution ceased. The conference became entirely democratic, with each constituent association having equal voice in its affairs.

The executive council is completing the organization, securing the cooperation of the twelve constituent organizations in the naming of the authorized voting delegates and working out a program for the Cincinnati meeting in September. At this meeting a permanent organization will be accomplished. At its accomplishment the present executive council will automatically cease to exist, and the future plans and policies of the American Hospital Conference will be determined by the constituent delegates.

The paper of Dr. Warner which led to the formation of this conference was published in the *Journal of the American Medical Association*, March 29, 1919, and the full report of the conference in Chicago, April 21, was compiled and published by the American Medical Association.



The Cincinnati Jewish Hospital. Over 60 per cent of the cases received in this hospital are treated free of charge.

Copies may be secured either through the office of the American Medical Association in Chicago or through the offices of the American Hospital Association.

The tentative program of the American Hospital Conference at Cincinnati follows:

Tentative Program

(The final program, including halls assigned for all meetings, will be ready for distribution when the conference opens.)

TUESDAY, SEPTEMBER 9, 1919

AFTERNOON, 2 P. M.

Executive Session.

(Liberty Room, tenth floor Gibson Hotel.)

Report of Executive Council, Dr. A. R. Warner, chairman.
General Discussion.

WEDNESDAY, SEPTEMBER 10.

MORNING, 10 A. M.

Joint General Session of the
American Hospital Association and American Hospital Conference.
(Ball Room, Hotel Gibson.)

General Subject: "Hospital Standardization."

The Organization and Functions of a Hospital (Speaker to be announced).

Medical Education Through the Visiting Staff and Interns, Dr. John M. Dodson, dean Rush Medical College, Chicago.

Better Professional Work Through a Better Staff and Better Records, Mr. John G. Bowman, executive secretary, American College of Surgeons.

AFTERNOON, 2 P. M.

Joint General Session of the
American Hospital Association and American Hospital Conference.
(Ball Room, Hotel Gibson.)

The Hospitals' Service to Humanity, Rev. Charles B. Moulinier, S.J., president Catholic Hospital Association of the United States and Canada.

Discussion opened by Miss Edna G. Henry, president American Association of Hospital Social Workers.

The Education of a Nurse (Speaker to be announced).

The Trustees and Laymen Viewpoint (Speaker to be announced).

THURSDAY, SEPTEMBER 11

MORNING, 10 A. M.

Executive Session.

(Liberty Room, tenth floor Hotel Gibson.)

General discussion of organization and work.

AFTERNOON, 2 P. M.

Executive Session.

(Liberty Room, tenth floor Hotel Gibson.)

General discussion of policy and procedure.
Adjournment.

Cincinnati Fountain Square.

THE AMERICAN DIETETIC ASSOCIATION

Plans and Program—Joint Meeting with American Hospital Association Takes Place of Section on Dietetics

Were it necessary to give evidence of the rapid advance of dietetics and dietotherapy in hospitals and other institutions during the past two years the meeting of the American Dietetic Association would be abundant proof. This organization was formed for the purpose of helping the dietitian solve her hospital problems and helping the hospital solve its problems in the dietary department.

At the first annual meeting so many dietitians in other fields were present and eagerly adding their helpful suggestions as well as their problems, that it was deemed advisable to include all of these in the activities of the association.

As a result sections have now been formed and plans started for specific work in each of the following phases in dietetics: (1) the hospital dietitians who supervise the preparation of special orders or who prepare the diets in a metabolism ward; (2) the administrative dietitian who supervises the work of the entire culinary department, in hospitals or other institutions, in commercial enterprises, school lunchrooms, etc.; (3) the social welfare, or field dietitian, who works through the various social service agencies, through dispensaries, and in private consultation; (4) the teaching dietitian who teaches dietetics to nurses, or one who teaches the various subjects in schools intended to fit young women to become dietitians.

The City Hall.

The membership of about three hundred includes besides dietitians, members of the faculty of practically all leading schools offering courses in nutrition and dietetics, the majority of our nutrition experts, some medical men, and hospital superintendents.

Commercial firms dealing in food materials or anything pertaining to food service recognize the value to them of getting in touch with dietitians.

Needless to say, every dietitian who can possibly be

The Art Museum of Cincinnati.

View of Ohio River from Eden Park.

present at this meeting will be there even though some sacrifice is necessary or some obstacle must be overcome. Hospital superintendents and medical men also, will find it worth while to attend these meetings.

The American Dietetic Association will again meet jointly with the American Hospital Association. Its headquarters will be on the mezzanine floor of the Gibson Hotel. Its commercial exhibit will also be located there. The regular meetings of the association will be held in room B, mezzanine floor (see diagram A) and in the Cascades room, basement floor.

Music hall of Cincinnati.

Program

MONDAY, SEPTEMBER 8

AFTERNOON, 3 P. M.

Registration.

EVENING, 8 P. M.

Informal gathering, music, inspection of exhibits (with American Hospital Association).

TUESDAY, SEPTEMBER 9

MORNING, 10 A. M.

General Session.

Formal opening of the Convention.

Major C. R. Holmes, chairman of the Local Committee, American Hospital Association, presiding.

Address of Welcome, Mayor John Galvin of Cincinnati.

Adjournment to meeting of the American Dietetic Association on the Mezzanine floor.

President's address, Lulu Graves, president American Dietetic Association.

Subject: Relation of the Dietitian to the Hospital Staff, Annie W. Goodrich, formerly dean, Army School of Nursing.

AFTERNOON, 2 P. M.

Subject: Courses of Instruction for the Training of Dietitians, Katharine Fisher, Teachers College, New York City.

Discussion, Lenna Frances Cooper, Battle Creek Sanitarium.

Subject: Training of Pupil Dietitians, E. M. Geraghty, New Haven Hospital.

Discussion, Mrs. Agnes O'Dea, Johns Hopkins Hospital.

EVENING, 8 P. M.

Reception and inspection of exhibits (with American Hospital Association).

WEDNESDAY, SEPTEMBER 10

MORNING, 9 A. M.

Section on Teaching, Katharine Fisher, chairman.

Subject: Standardization of Curriculums for Nurses' Training Schools, Miss Ruth Shelow, University of Cincinnati, formerly instructor Army School of Nursing.

Discussion—

Subject: State Board (Nursing) Requirements in Dietetics, Helen Wells, Drexel Institute.

Discussion, Miss Gertrude Thomas, University Hospital, Minneapolis.

Section on Social Service, Miss Blanche Joseph, chairman.

Subject: Training of Social Service Dietitians, Emma Winslow, Charity Organization Society, New York City.

Discussion.

Subject: Social Service Dietetics, Mrs. Mary L. Schapiro, director of Bureau of Home Economics and Dietetics, New York City.

AFTERNOON, 2 P. M.

Section on Administration, Emma Smedley, chairman.

Subject: Problems in the Administration of Government Dormitories, Mary A. Lindsley, dietitian, Government Hotel, Washington, D. C.

Subject: Hospital Cafeterias, Eleanor Wells, Teachers College, New York City.

Discussion.

Subject: Cafeteria Management, Blanche Geary, National Y. W. C. A., New York City.

Discussion.

Subject: College Feeding Problems, Emma Baker, Teachers College, New York City.

Discussion, Elsie Leonard, University of Wisconsin.

EVENING, 8 P. M.

Subject: Some Feeding Problems "Over There," Mabel C. Little, with Y. W. C. A. and Y. M. C. A., France.

Subject: Dietitian Service Abroad, Bertha N. Baldwin, with American Red Cross, France.

Section on Dietotherapy, Minnie A. Phillips, chairman.

Subject: Dietotherapy, Dr. Louis Baumann, assistant professor of medicine, University of Iowa.

Discussion.

Fernbank Dam on the Ohio River.

THURSDAY, SEPTEMBER 11

MORNING, 9 A. M.

Chairman, Bertha M. Hyde, dietitian Cincinnati General Hospital. Round table of discussion led by Miss Lulu Graves.

Topic: Institutional Problems.

12:30—1:30 P. M.

Buffet luncheon at Cincinnati Medical College, with the American Hospital Association.

AFTERNOON, 2 P. M.—3 P. M.

Address: The Relation of the Physician and Dietitian, Elizabeth Campbell, M D.

Address: Dietetics from a Physician's Standpoint, Roger S. Morris, M.D.

3 P. M.

Open House at the Woman's Building, University of Cincinnati.

EVENING, 7:30 P. M.

Business Session, 8:00 p. m.

Subject: Work of the Red Cross Chapter Committees on Nursing Activities, Clara D. Noyes, acting director, Department of Nursing, American Red Cross, Washington, D. C.

Subject: The Dietitian in the Public Health Service, Wm. H. Walsh, Hospital Division, Public Health Service.

Subject: The Organization of the Dietary Department of a Military Hospital, Winifred Short.

Moving Picture Film, "Food Supervision for the Army," Lieut.-Col. J. R. Murlin, University of Rochester (former chief of the Division of Food and Nutrition).

FRIDAY, SEPTEMBER 12

MORNING, 10 A. M.

Subject: The Dietitian in the Hospital Dispensary, Bertha Wood, Food Clinic, Boston Dispensary.

Subject: What We Have Learned in Dietetics from the Army, Lieut.-Col. J. R. Murlin, M.C.

Subject: Hospital Food Waste, Ernest E. Irons, Lieut.-Col., M.C., formerly commandant, Base Hospital, Camp Custer.

AFTERNOON, 2 P. M.

Subject: Diet in Disease, Mary Swartz Rose, Teachers College, New York City.
Report of the meeting of the American Home Economics Association, Ruth Wheeler, Goucher College.
Report of the Committee on the Standardization of Curriculums for the Training of Dietitians.
Report of the Committee on Nomenclature.
Report of the Committee on the Standardization of the Work of Dietitians.
Miscellaneous Business.

CINCINNATI—THE "QUEEN CITY OF THE WEST"

Many Attractions of the City Described—Sanitary Conditions Most Satisfactory—Educational Facilities, Artistic, Literary, Musical and Professional, of High Class—Only City-Owned Railroad, an Income-Payer

Metropolitan Cincinnati, known as the "Queen City of the West," and the "Gateway to the South," is often described as the most northern of Southern cities, and the most southern of Northern cities, and has at the present time a population of nearly 650,000. These persons find homes on both sides of the Ohio river. While those living on the southern side being in Kentucky, are not classed as citizens of Cincinnati, by the census-takers, they are really a part of the city, as most of them find employment in its industries and are counted by the business interests of the city.

Cincinnati now occupies about one hundred square miles,

A park scene in Cincinnati.

most of this territory being a circular amphitheatre of hills which is bisected east and west by the Ohio river, while the Licking river bisects the southern half, and the northern part lies mainly between the Big and Little Miami rivers. Owing to the peculiar formation of the territory which the city occupies, the lower part near the river being a broad platform with other raised platforms above, it has been easy to install a drainage system for sewage, all waste being led into the Ohio river in an easy manner due to the grades. This has made Cincinnati one of the most sanitary cities in the United States.

LOW DEATH RATE

The statistical records of the city demonstrate the fact. Cincinnati is noted for its low typhoid fever death rate, which is due not only to the splendid sanitary condition otherwise but to the fine water system that provides excellent drinking water for its citizens. The water works are deemed by experts as among the best in the country. Vital statistics show Cincinnati to excel in all regards save for tuberculosis. The medical interests of the city have given great consideration to this problem and it was the first city in the country to establish a hospital especially for the treatment of the dread disease. Only tuberculous patients are taken and they are cared for in all stages of the disease. The fight is not confined to hospital cases only.

The Anti-Tuberculosis League (described in THE MODERN HOSPITAL, December, 1917, p. 400) is one of the most active organizations in the city. Tenement children who show symptoms of the disease are sent to the country and given fresh-air treatment in summer camps. This and the work of the Better Housing League, which seeks to eliminate the foul tenement house district, is having its effect, as is shown by the reports of the vital statistics.

IMPORTANT DISTRIBUTING CENTER BETWEEN THE SOUTH AND NORTH

Cincinnati early gave indication of its commercial importance as a distributing center. Records show that from February to May, 1802, there was exported from the city 4,400 barrels of flour. The population at that time was less than one thousand, and but one hundred and seventy-

The Suspension Bridge.

two buildings had been erected. At the present time the city is known as a big center where products are shipped north and south and for foreign markets. One of the most important industries is the making of machine tools. The manufacture of shoes, meat packing, and printing are among the more extensive industries of the city.

RANKS HIGH FOR EDUCATIONAL FACILITIES

In the matter of education, Cincinnati leads many cities and is among the best educational centers. The early settlers gave this matter special consideration. One of the first institutions founded was the university, which was established in 1803. The elementary schools came into being with the first settlers in log cabins. Cooperative and vocational training were tried out in Cincinnati years ago and because of the success of the methods there the plan has been adopted in other places, so that the city can take honest pride in helping to inaugurate those great modern educational methods.

There is now a system of public schools with fifty-nine day elementary schools; ten special; two night high schools; six night elementary schools; seven public high schools; and a teaching force of about two thousand. A host of private schools flourish including fifty-one Catholic parochial schools.

The University of Cincinnati, part of the public school system, is affiliated with a medical school and dental departments; is connected with one of the most famous observatories in the Middle West, and offers its medical

students facilities for study in the new General Hospital. The university is located on a thirty-acre campus adjoining a beautiful park and the buildings are all that could be desired. Many prominent medical educators have praised the work of the medical college.

The Ohio Mechanics' Institute is another important factor in the educational institutions of Cincinnati. The institute has a well-equipped building and library and maintains day and evening schools. The enrollment reaches into hundreds who pursue classical, literary, and scientific courses. There are also other medical and surgical schools, training schools for nurses, in connection with various hospitals, two dental colleges and several schools of expression. The Lane Theological Seminary and the Hebrew Union College for the education of rabbis

Christ Hospital, which conducts an excellent training school for nurses.

for the Reformed Jewish ministry. There are two Roman Catholic colleges, five Catholic seminaries for the education of priests, and six academies and seminaries for the education of Catholic women.

NATURAL AND OTHER ADVANTAGES—CLIMATE, WATER WORKS, ETC.

The climate of Cincinnati is all that could be expceted of a city of its special location. The winter temperature averages between 30 and 40 degrees, while the average during the summer is 75 degrees.

Experts who have visited the waterworks have all made the same favorable report: that nowhere is there a water system which gives more efficient service than that of Cincinnati. The construction of the waterworks was the first step taken by the city towards a municipally owned public utility. The plant cost about $12,000,000, and was several years in building. It was completed in October, 1907, and was turned over to the city July 1, 1919. The filtration plant of the system is the most important unit and the results obtained have given Cincinnati the reputation of having as good water as can be found in any municipality. Its value may be noted in the reduced death rate from typhoid fever, it being practically nothing.

A recent improvement in the plant was the installation of a high-pressure system in the business and wholesale district for fire protection. This has resulted in a material reduction in insurance rates with a greater reduction in prospect.

CINCINNATI AS AN ART AND MUSIC CENTER

The city is famed as an art and music center. The reputation gained in music in its early days has been maintained because of its merit. The Cincinnati May Festival is an event that annually attracts thousands by the high character of the works presented.

A host of music students find Cincinnati an excellent place for instruction as its facilities are all that could be desired. The College of Music and its Conservatory rank among the best in the United States, attracting students from all parts of the country and some from abroad.

The Cincinnati Symphony Orchestra has been pronounced by critics one of the best in the world. Those who are materially interested in its future expect wonderful results from this orchestra as it progresses under the direction of Eugène Ysaye, the famous Belgian violinist.

In the realm of art Cincinnati has taken its place with other American cities. Among the art works adorning the city special mention should be made of the Tyler-Davidson fountain, in one of the most prominent sites in the city, Fountain Square. The bronze statue is called a masterpiece by judges of art.

The Art School has been responsible for the development of a number of artists who have spread the fame of the city—among them Frank Duveneck, who took high honors at the Panama-Pacific Exposition.

The movement to make Cincinnati an art center started in 1826, when a private studio, known as "The Academy of Fine Arts," was established. It was in this school that the famous sculptor, Hiram Powers, received his first

Seton Hospital, operated by the Sisters of Charity.

instruction. In 1869 an endowed art academy was established and in 1887 the institution moved into its own home in Eden Park, one of the most beautiful buildings in the Middle West. Adjoining the Art Academy is the Art Museum, one of the show places of the city, which has many visitors.

A MUNICIPALLY OWNED RAILROAD SUCCESSFULLY RUN

The Cincinnati Southern railroad is owned by the city, being the only one thus owned in the world. The right of way covered by the road is 100 feet wide and 326 miles long, reaching from Cincinnati to Chattanooga, Tenn. It is said that Cincinnati has thus become the longest city in the world.

The movement to build this road started in 1869, authority to issue bonds for the purpose being ranted by the Ohio legislature. Three series of bonds were issued amounting to $18,000,000, and another series of $300,000 was sold to construct terminals. It is claimed that the present value of the road is $45,000,000. It is operated by a leasing company which pays sufficient for its use to meet the interest on all bonds, take care of the sinking fund, and yield a large sum for the general expenses of the city.

The establishment of this road did much for the city as it provided its first direct outlet into the South. It is now one of the most important trunk lines for traffic between the North and Middle West to the South.

The hospitality of Cincinnati has become famous. Visitors are warmly received and the citizens vie with each other to make their stay pleasant so they will leave the city with a desire to "come again."

SOME OF THE HOSPITALS OF CINCINNATI

Many Old Hospitals with Small Beginnings Which Have Enlarged to Meet Growing Needs

Cincinnati Tuberculosis Sanatorium

The Cincinnati Tuberculosis Sanatorium is a municipal institution established for the sole purpose of treating patients suffering with tuberculosis. It was one of the very first hospitals of this nature established in the United States. Patients who are ailing but slightly as well as those suffering from the disease in an advanced stage are taken and given treatment in this institution. The hospital is located in one of the most beautiful suburbs of Cincinnati.

Longview Hospital

Longview Hospital is a state institution for the feeble-minded located in one of the most beautiful suburbs in Cincinnati. The hospital, which has a capacity of 1,600 beds, is now under the direction of Dr. Emerson A. North. The beautiful grounds which surround Longview are one of the show places of Cincinnati.

The Booth Memorial Hospital, Covington, Ky.

The Booth Memorial Hospital, East Second street, Covington, Ky., is just seven minutes from Fountain Square, Cincinnati. It is beautifully situated, commanding an extensive view of the hills of Kentucky. An extension to be erected this Fall will, when completed, give this hospital all modern conveniences.

The Jewish Hospital

The Cincinnati Jewish Hospital is at Burnet avenue, Avondale, half an hour's ride from the heart of the city. Over 60 per cent of the cases received are treated free of charge. The capacity of the hospital is fifty beds.

Covington General Hospital

The Covington General Hospital while across the river from Cincinnati, is so near as to rank with the hospitals of that city. This hospital has thirty beds.

The Deaconess Hospital

The Deaconess Hospital is located at Clifton avenue and Straight street, Cincinnati. The hospital was founded in 1888 by the Deaconess Society, a Protestant organization. The hospital is conducted under the supervision of Rev. A. G. Lohmann. There are eighty beds in the institution. A training school for nurses is conducted in connection with the hospital and an excellent nurses' and deaconess' home is maintained.

Bethesda Deaconess Hospital, which treated 3,090 patients last year.

Bethesda Deaconess Hospital

The Bethesda Hospital, located at Reading road and Oak street, Cincinnati, was founded in 1896 by Rev. Christian Golder, D.D., who remains its president, and his sister, Louise Golder, a deaconess, who has been its superintendent from the beginning. The institution consists of three plants, twenty-two buildings, and eighty-four acres of land. It comprises the following departments: Maternity, sixty-five beds; general, seventy beds; children's, twenty-five beds, and Scarlet Oaks Sanatorium of sixty-five beds.

The hospital maintains a school for nurses, a Bible training school, Home for the Aged, and branch homes and stations in Kansas City, Kan.; Chicago, Ill.; Milwaukee, Wis.; La Crosse, Wis.; Detroit, Mich., and Grand Rapids, Mich. There is a medical staff of thirty-two doctors, eighty deaconesses, and fifty-five nurse students. The number of patients treated last year was 3,090; births, 929. Charity work amounting to $80,000 is done annually.

Christ Hospital

The Christ Hospital was founded in September, 1890, by the Elizabeth Gamble Deaconess Home Association. The hospital contains two hundred beds. An excellent training school for nurses is operated in connection with the hospital. Besides the institution which is located on Auburn avenue, Mount Auburn, Cincinnati, this hospital maintain three rest cottages, two located in the vicinity of Cincinnati, and one at Lakeside, on Lake Erie.

Good Samaritan Hospital

The Good Samaritan Hospital is one of the oldest in Cincinnati. The Sisters of Charity of the Catholic Church founded the work in 1852. The first hospital under their care was called the "St. John Hotel for Invalids," and the work from a small beginning grew into a large institution. Having outgrown its former building the care of a penniless, friendless man led to the donation of the present building and the change of name. The needs of the hospital being made known to two benevolent protestants, with Catholic wives, they bought the old Marine Hospital, which had been abandoned by the government after the Civil War, and presented it to the sisters, asking that it be called "The Good Samaritan."

Covington General Hospital, across the river from Cincinnati.

The work has attained a national reputation and a new building is contemplated. A fine site has been secured and plans made. Construction will begin as soon as funds are obtained. The present building was first occupied in 1866 and patients are cared for regardless of denomination of nationality. The hospital has 250 beds.

Seton Hospital

The Seton Hospital, on West Sixth street, Cincinnati, was taken over by the Sisters of Charity, June 24, 1904.

Booth Memorial Hospital, Covington, Ky., a seven minutes' ride from Cincinnati.

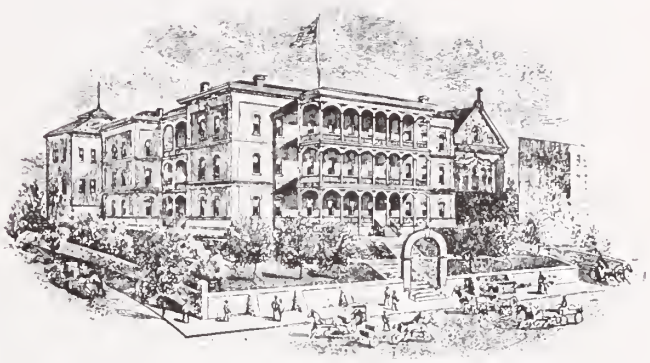
The institution was built by the Presbyterians and was operated by them up to 1900. It has eighty-five beds. A nurses' training school is conducted in connection with the hospital. In a recent rating by the state it was given a perfect record.

THE TRAINING OF HOSPITAL EXECUTIVES

Previous Lack of Opportunity for Training—Comprehensive Course Offered by University of Cincinnati and Cincinnati General Hospital

By A. C. BACHMEYER, M.D., Superintendent and Medical Director of the Cincinnati General and Tuberculosis Hospitals, Cincinnati, O.

Administrative positions in hospitals, such as those of hospital managers and hospital superintendents, are rightfully within the scope of the activities of the physician. It may not be maintained, however, that the training obtained by the physician as a part of his college work qualifies him for such executive functions. Investigation of the circumstances and motives that placed physicians in hospital administrative activities, in most instances, establishes that either a native capacity for concise executive work existed, or premedical training had included definite executive education. This type of physician does not find satisfaction in the unorganized, unsystematized practice of medicine, and therefore avoids it, taking up medical administrative pursuits. The number of physicians so qualified is not large, and well below the demand. This condition has led to the entrance into this field of activity of non-medical executives as managers and superintendents. As is true in the case of the physician, the non-medical executive, trained in the world of industry or business, is only partially qualified for such positions through his lack of medical knowledge, so essential in the proper understanding of hospital problems. The average physician and the average executive in hospital administrative work are lacking each in just those things in which the other is qualified. In many instances,



Good Samaritan Hospital, operated by the Sisters of Charity.

and this pertains particularly to the smaller hospitals, nurses have been installed as hospital executives, but the degree of success attending their services is in proportion to their familiarity with the methods and practices of commerce. The curriculums of nurses' training schools afford but meager instruction in the diverse problems of the large hospital executive.

The best hospital executive is the versatilely trained individual, well oriented in the problems and practices of the doctor, the nurse, and the business manager. This composite and specialized training is not provided for in the courses now offered by educational institutions. Every large hospital continually receives inquiries as to opportunities to pursue studies qualifying for this high type of hospital administration. At the present time the hospitals find it necessary to reply that the only known method is to serve in minor positions as assistants until qualified through the process of experience.

To meet the needs for well-trained men and women for these positions the University of Cincinnati and the Cincinnati General Hospital have formulated plans to provide instruction in hospital administration through courses to be given at the general hospital, the medical college, and in various departments of the university.

ORGANIZATION AND INSTRUCTION

A division of hospital administration will be added to the department of industrial medicine and public health of the Medical College of the University of Cincinnati. The superintendent of the Cincinnati General Hospital will serve as the chief of this division. Instruction will begin at the time of the opening of the fall semester of the medical college, and will consist of one year (twelve months) didactic and practical training. During the first month the schedule will provide for practical work in various departments of the Cincinnati General Hospital which time will be regarded as a period of orientation in hospital problems. Thereafter the work will be so arranged as to provide for practical instruction in the various cooperating hospitals of the Cincinnati district during the morning hours. The afternoon hours will be devoted to didactic lectures, round table conferences, quizzes, discussions and survey trips in groups.

In view of the fact that non-medical executives and nurses are proving successful managers of hospitals, these courses of instruction will not be confined to physicians, but will be available to all persons whose individual qualifications are approved by the director, and whose preliminary education will permit them to matriculate in the university. Certificates will be awarded to students satisfactorily completing the prescribed courses, which will indicate the nature and extent of the work pursued.

The proposed course will include didactic, practical and seminar work, and will be so arranged as to provide for lectures daily and for seminar hours, (round table discussions) on three or more days each week. The round table conferences or discussions will be led by hospital superintendents and others especially qualified.

The practical work will be so arranged as to provide for a rotating assignment of students, through the various departments of the Cincinnati General and other hospitals (associated for the purpose).

The didactic and seminar studies will cover the following subjects:

From the College of Commerce:

Business management
Corporation accounting
Cost accounting } As applied to hospitals.
Budget making

From the College of Household Arts and Home Economics.

Institutional management.
Marketing—relation of buyer and seller.
Standardization of supplies.
Dietetics and nutrition.
Kitchen organization,
Laundry methods,
Linen—control and economies.

From the College of Medicine and Hospital.

Hospital and clinical records,
Military hospital administration.
Board of control—organization, function, etc.
Professional staff organization.
Management and control of contagious diseases,
Institutional hygiene.
Jurisprudence as related to hospital administration.

From the School of Nursing and Health.

Ward management.
Nursing school organization and management.

From the College of Engineering and others:

Construction—Planning, principles, types, materials,
Engine room—organization.
Mechanical equipment—utility, operation, maintenance.

The University of Cincinnati in organizing its facilities for this type of training realizes that the one year of intensive instruction as contemplated will not produce a group of mature hospital executives. Such work will, however, make available to the hospitals of the country a group of men and women fundamentally trained in all the diverse aspects of hospital management, thus eliminating the necessity of utilizing as executives, persons highly qualified in certain respects, but almost wholly untrained in equally significant phases of the work, common to every hospital.

TOPICS FOR ROUND TABLE DISCUSSIONS

Suggestions from Members as to Subjects to Be Discussed at Cincinnati Meeting of the American Hospital Association

It was suggested to THE MODERN HOSPITAL that even greater interest and value would be imparted to the round table discussions at the Cincinnati meeting of the American Hospital Association if some of the topics proposed for discussion were published in advance, so that those who attend the meetings might have an opportunity to consider them in advance. Accordingly, inquiries were addressed to a number of representative hospital people in regard to the subjects they would like to have discussed. Some of the replies follow; others, unfortunately, were received too late for publication.

From a superintendent of a large city hospital on the Atlantic coast:

"One great question that is before us, and I think most hospitals, is the question of wages. Wages must be increased, and I would like to see the discussion of what rearrangements in hospital management would be made to give higher wages and yet possibly cut down the number of employees so that the total expense would not be greatly increased."

From a superintendent of a hospital in a Northwestern prairie state:

"To my mind, the most important topic that hospitals can consider at this time is the question of the supply and division of probationer nurses, the hours of duty, the length of the course and the monthly stipend for the time of training, also the question of preliminary training. We find a large number of applicants that we are obliged to reject because they lack six months or a year of the full two year's high school required by our law."

From the superintendent of a hospital in a Middle Western state:

"The greatest problem confronting me at the present time is how to secure more applicants to the training school and how to make this part of the hospital work more attractive to the right kind of women. This is a problem that is confronting nearly every hospital in the country today and I should like to find out how it is to be solved."

From the superintendent of a hospital in a New England state:

"I should like to have brought up for discussion whether hospitals which do a certain amount of charity work should be required to care for compensation cases in their wards for less than the actual cost of maintenance of the patient."

From the superintendent of a hospital in a Middle Western state:

"I have to suggest for discussion ethical and profitable hospital advertising. My idea in this connection is not simply to exploit the individual hospital, but to familiarize the people with the advantages of hospital service in general."

From the superintendent of a large Eastern hospital:

"I am much interested in the question of community ambulance service with a view to relieving the individuals of the present extravagant plan of each hospital maintaining a competent ambulance service, which often puts on expense upon the community far beyond the work accomplished."

From the superintendent of a hospital i nthe state of New York:

"I should like to have discussed the question of the survey of the city or town to determine how large a hospital should be planned and built."

From the superintendent of a hospital in a Southwestern state :

"One of the most important questions which could be considered at present is the way in which a small hospital can be financed to enable it to serve its community satisfactorily. The wretched financial condition of most small hospitals is the source of the low standards which often prevail and the temptation to unethical practices to which some of them succumb."

From a hospital in a New England state:

"One of the greatest considerations at this time in which we feel that the association could best assist individual institutions, would be in standardizing cost of all supplies. Most of the large institutions having cold storage plans can take advantage of low prices, putting in a large supply ahead. Others can not do this. Institutions having membership in the association in different areas ought to know exactly what each is paying for its supplies even though no cooperative plan should be entered into. Very often we get quotations on supplies of all kinds and have no way of comparing them with other institutions.

THE HOSPITAL AS A COMMUNITY SERVICE*

Lessons Taught by the War—Need of Getting Away From Local Jealousies—Value of Cooperation

By H. E. YOUNG, B.A., M.D., C.M., LL.D., Chief Officer of Health, British Columbia; President Canadian Public Health Association.

Since the outbreak of the war in 1914, conditions in the nation have been such as we have never dreamed of. . . . We have been taught the great value of cooperation as shown by the work done by our own armies in conjunction with those of the allies. This idea is bearing fruit and bringing forth cooperation in everything else, and we believe that for the future, cooperation in our hospital work will be one of the outstanding results of the present war.

It is said that in medicine the best service can only be obtained by millionaires or by the very poor in the cities. The millionaires get it by paying for the service of experts. The very poor get it gratis in the hospitals of our cities which are manned by these same specialists, but the great mass of the people are not able to avail themselves of these privileges. At the same time, it is the great mass of the people who, through their taxes, are keeping up our institutions and are paying the cost, and it is beginning to dawn upon everyone that they are entitled to an equal service with their fellow citizens of any class. The idea has germinated that will result in a movement toward establishing hospitals that will be at the service of everyone. Not a hospital in the old acceptation of the term as meaning a place that you would only go to when you were too sick to do anything else, but a hospital in the sense of the application of the services of an institution to which you could go for advice and service that would lead to the prevention of sickness. It will not be an institution where the patient will come for a cursory examination, be given a bottle of medicine by an overworked doctor, and told to come back in a week. It will be an institution that will be the center of the medical activities of the district; it will be an institution whose greatest benefit will be derived from the development of the sociological side; it will be an institution to which when a patient comes he will not only be given every consideration and advice, but officers connected with the institution will follow up that case to the home, will find what the environment of the patient is, what are his family circumstances, what observance he is giving to the ordinary rules of health. He will be advised on these subjects, and the doctor also will be advised in order that he may take into account in his diagnosis all of the circumstances connected with the case. It may be said that this is an ideal picture. Ideals presented to the people in an attractive form stimulate them to an effort to bring about their realization and to make practical these ideals.

Cooperation is one of the first steps that is necessary. We must get away from the idea of local jealousies. We must get away from the idea that a small community must possess a hospital because some other hamlet, which is its rival some few miles distant, has already started one.

A few years ago during the boom and the period of railroad construction in the province, town-planning was the favorite diversion of the real estate dealer, and the pretty picture he drew of his townsite invariably showed the proposed site of his hospital. This, with the sites for the schools and the town hall, being used as sugar for the bait in his lot-selling game. Many of these towns have not yet even got beyond the picture stage, but others progressed so far as to justify, in the opinion of the promoters, the beginning of the hospital. Local enthusiasm was aroused, money raised, and this, with financial assistance from the government, provided for the building. Unfortunately, the population fell and the prospects for the immediate future of an increase are, to say the least, not very rosy. But the hospital remains with no diminution of the fixed charges for maintenance and with recurring annual deficiencies in the revenue. I am not criticizing the hospitals, or the present management of the smaller institutions. The fact that they have been able to continue at all speaks volumes for the zeal and devotion of those who have voluntarily assumed the responsibility of carrying on the work. But, nevertheless, the present financial conditions of many of the smaller institutions is a cause of worry and anxiety to those in charge and the prospects in the immediate future for any improvements are not encouraging.

We in this province are, however, not alone as regards this condition of affairs. Other western provinces have gone through the same experience. Our province is very large in extent. Our population is scattered. The depression following the collapse of the speculative period, coupled with the large drain on our population that has been made by the war, is bringing the condition home so forcibly in the provinces of the west that they have adopted a scheme for the solution which appears, in the case of Alberta and Saskatchewan, to be meeting the difficulties. These provinces have recognized the fact that in the sparsely settled districts the maintenance of the smaller hospitals was impracticable. They recognized the absolute necessity of having hospital accommodation, and as a result they have passed an act which makes provision whereby groups of municipalities and urban centers may cooperate in the organization and maintenance of hospitals to serve their people. It provides that two or more rural municipalities may cooperate with one or more urban centers in the establishment of a municipal hospital. The act provides that each municipality concerned has the power to levy a rate, not exceeding two mills on the dollar, on all assessable property within its boundaries for hospital purposes. The managing boards are composed of representatives of all the councils of the cooperating municipalities. . . . They are getting back to the idea of cooperation. They are adopting the principle which, in the education departments of the different provinces, is being found to be of great advantage, that is, the centralization of school work by the establishing of graded schools at some central point, providing for transportation of pupils to that school, and doing away with small schools.

In the establishing of the graded school the children have the benefit of the cooperation of a number of teachers, they can follow out their course from grade to grade; whereas in our isolated schools, there is a limit not only to how far they can go, but there is a limit to the best efforts of the teacher when the teacher has to teach all the subjects from the A B C's to Euclid. Now if it works so well in the schools, why cannot this same principle work out in our hospitals? I pointed out in the beginning of my remarks, that it has been said that in medicine the best services can be obtained only by the millionaires or by the very poor in the cities. By this is meant, that in the larger institutions the facilities provided for the treatment of the sick are available in a way that we can never hope to obtain in small institutions, but if two or three or more adjoining municipalities were to cooperate and found an hospital that would receive the financial assistance of the municipalities, we would be taking a

*An abstract of a paper read before the First Annual Convention of the Hospitals of British Columbia.

step in the same direction that the school authorities have taken, and we would be able to get correspondingly good results. In these days of easy transportation with the increasingly large number of motors, with the establishment of good roads, what, a few years ago would have been a day or two days' journey may be done now in an hour or two, so that now we may say a centrally located hospital is in direct and easy touch with the territory within a radius of fifty miles. It would mean, on the basis of the taxation adopted in Saskatchewan, a very low charge upon the municipality. It would have a financial grant from the government, and between the two would be a free hospital for the people. It would mean cooperation amongst the medical men, and it would mean that such an institution would become a community center, not for the sick alone, but would be the hub from which would radiate the efforts and endeavors that are being put forth today in what we know as preventive medicine.

Sometimes a suggestion of this nature seems to be radical because at the first offering of the suggestion those whose interests are affected are most apt to object. I know, and I am speaking as a medical man, that it is very convenient for a doctor to have his hospital next door, especially when the population is a scattered one, because with a trained nurse in charge he feels much safer with his patient immediately under his supervision than if he has to make a visit every day, and probably have a trip of ten or twenty miles to do so. On second thought that same medical man would know that in a larger institution with a larger staff of trained nurses, with the advantage of consultation with other medical men, and with laboratory facilities, he is going to do far better work and get better results, and his patient is going to be much better off than if the old condition were to be continued. As for the institution itself, the maintenance charges of two or three or half-a-dozen smaller institutions would be done away with, economies would be practiced and training schools for nurses could be maintained that would be training schools in fact as well as in name. . . .

The development of a community hospital, such as I have outlined, would result in a broader training for nurses, and a larger field for their work. It would mean the training of some of the nurses more along the lines of health-work and result in the development of a system of district nurses whose duty it would be not only to visit the country schools, but to give prenatal instructions to expectant mothers, and to act as a link between the hospital centers and the people in the outlying districts. In other words, we would be carrying a gospel of health to the people. Nurses would be able to personally advise in matters affecting the health of the home—and it is time for a body of workers, mainly concerned in health missionary work, among the people, to appear. They would be able to cooperate with the laity in initiating and furthering all movements that would tend to prevent disease. They would be foremost in the work of child-welfare organizations, of propaganda against venereal diseases and tuberculosis, of all public health work and of other educative schemes.

Many years ago Florence Nightingale said that there could be no health of a community without health of the individual. The fundamental means of success in health of people is by education, and while our health department and our health officials throughout the province are working along the lines of education, yet the great difficulty that they find is in reaching a sufficient number of the people. We publish bulletins and distribute them as widely as we can, but the great drawback of this method is the fact that these, as a rule, fall into the hands of those already interested and do not reach those who should know the facts that we are trying to convey.

Experience has taught us that it is only when an epidemic of some sort arises that the interest of the people is aroused. Talk of an epidemic of smallpox will result in a great many people wishing to be vaccinated. You can frighten people with press reports of infantile paralysis, but you cannot rouse them to the danger that arises from epidemics of measles or whooping cough. They do not recognize the fact that probably there are more deaths from measles, or from the troubles that follow measles, than from almost any other disease. The provincial board of health is something that they hear about occasionally, but in which they are not interested. Its headquarters are far away from them and there is not that personal touch which is so essential in the work of health education. With our local hospitals as centers, with workers from these hospitals radiating throughout the districts, the personal touch is established and people begin to recognize that the health visitor is one who is not an officer of red tape, but a human being, well versed in the subject, and may meet them on common ground with heart-to-heart talks, explain to them the meaning of the "dont's" and also explain to them the meaning of the "why" they should follow out certain lines of conduct in their personal habits and in their family life. The board of health can, and does, direct the medical examination of the school children. Defects are discovered and the parents are notified of the defects, which, if attended to at the time, means that the child will not be handicapped by physical defects in after life. When the notifications are sent home to the parents, while in many cases they are attended to, yet in many others the importance is not understood and attention to the matter is put off to a more convenient time. Whereas if the follow-up work were adopted, explanations given to the parents of what the results to the child would be of neglect, action would be taken, but it would be taken simply because the parents would understand. In other words, they would be interested in health matters.

We have made a start in this in the province in regard to tuberculosis. We have a splendid sanatorium, but it is crowded with advanced cases. The cases we want to reach are those in the incipient stage that we can cure. We are asking that these cases be reported.

We are asking that the local hospitals set aside 10 per cent of their bed accommodation for advanced tuberculosis cases, and we are appointing a medical man to go round the provinces, not with the idea of looking after the advanced cases in the hospitals, but to take the names and addresses of those who have been reported in the early stages of the disease, to follow them up and bring directly to them the knowledge of how to take care of themselves, and particularly the knowledge of how to guard against infecting others. This is our work at present, and we intend to enlarge it, but we must secure the cooperation of those interested in the work in the smaller centers, and we hope in time to develop this scheme whereby the hospital will become a community health center of its district working in conjunction with the provincial board of health as the administrative body, and we hope to secure the services of the laboratories of the university to do the necessary health work that would be required of a laboratory. The university laboratories could provide experts who would visit the districts and would give an opinion on water supplies, sewage disposal, and questions of paramount importance from a health point of view in smaller districts where facilities for handling these things are not

as great as in cities. They would be able to advise directly with municipal bodies who are installing water supplies, and to advise generally on questions of health as affecting the community. Lectures would be delivered on health matters either at the hospital or by someone connected with the hospital, at different points in the district.

My presentation of the subject may appear as a description of an ideal condition . . . but I feel that I have outlined in a general way the natural growth of the hospital. We are coming to the days of state control of medical service in the country. Health insurance, old age pensions and the care of the sick are not subjects of probability, but are something that is being given effect to in other countries. Under our democratic form of government we will have to work the general application of these principles out gradually, but those who have given any attention to the subject recognize the fact that all governments will have a department, presided over by a minister of health; that medical attention of the people will be a function of the state, and that hospital accommodation. in the broad sense of the word, will be free and available to every citizen. Standardization in all branches will be brought about, and while your own immediate problems for the management and maintenance of your hospital are engrossing your attention, still those who are interested in these subjects and are giving them thought, recognize that the people are going to demand, and they are entitled to equality of service, no matter in what part of the country they live. The war is not over, nor can we even begin to count what effect the loss of our men is going to have upon our national life. When we begin to realize what a halt this loss is going to cause in our productive life as a nation, and when we begin to realize how even our national existence will be threatened, we are going to insist upon steps being taken to conserve our assets, and particularly the asset of human life. Our mortality tables, which are at present simply records of our incompetence, will be studied with a full knowledge of what they mean and with an appreciation of that knowledge will come an insistence by the people for different methods in the ordering of our lives. Not only will they insist, that as far as humanly possible the span of life shall be lengthened, but that during that span of life an individual shall be fully equipped mentally and physically, so as to devote his best service to the advancement of the Nation.

TEAMWORK IN THE MUNICIPAL HOSPITALS AND DISPENSARIES OF BUFFALO

Coordination of Philanthropies Makes for Efficiency—Five Health Centers Coincide with Charity Organization Districts—University of Buffalo Gives Helpful Service

"The city of Buffalo has demonstrated that it is practical, economical, and efficient to coordinate 95 per cent of the philanthropies dealing with preventive and curative medicine," says Dr. Walter S. Goodale, writing in *Health News*, the organ of the New York State Department of Health. Dr. Goodale is hospital and dispensary organizer and inspector of the department of health of New York.

Buffalo is divided into five health centers, each one of which is made up of one or more of the ten established Charity Organization Society districts. This gives to the service of the health centers a complete set of philanthropic machinery. For these five health centers, five full-time physicians are appointed, with salaries ranging from $1,800 to $2,100 a year with $300 for transportation.

In each health center a dispensary is set up under a city physician who keeps daily office hours except on Sundays and holidays—9 a. m., 1 to 3 p. m., and 7 to 8 p. m. The physician also makes home calls when it is necessary. At other than the specified hours, calls for a physician are left at the main office of the department of health and dispensaries (formerly a bureau of the department of health, but recently created as a separate department by municipal law). Prescriptions are filled at certain specified drug stores and charged to the city.

In addition to their dispensary work, city physicians are charged with the duty of admitting indigent persons to private hospitals, and, for such patients, are held responsible for accuracy of diagnosis, appropriateness of treatment, and prompt discharge, although they do not interfere unduly with the actual treatment of members of the hospital staff.

The question of whether or not applicants for medical care are a proper charge against the city is decided by the overseer of the poor, not by the department of hospitals and dispensaries, and this distinct line of cleavage has done away with much confusion and red tape. If a person applying for relief is referred by any recognized philanthropic organization, no investigation is made. Otherwise one treatment is given without question, and investigation is then made by the Charity Organization Society. Persons in need of care may apply to the city physician first and the superintendent of the poor afterwards, or vice versa. If the patient is confined to bed, a friend must apply to the overseer of the poor before or after the physician's visit. If he is in dire need, an emergency order is issued, an ambulance called, and he is taken to the hospital at once. If the superintendent of the poor issues the emergency order, it must be approved by the physician within twenty-four hours; if it is the physician who issues it, the overseer of the poor may order its discontinuance if an investigation shows it is not a proper charge against the municipality.

Ten special clinics are supported in Buffalo. In the thirteen divisions of the infant welfare clinic, nursing service is supplied gratis by the district nursing association; free milk, for which the city appropriates $12,000 annually, is given to babies whose parents are unable to pay for it; and advice is free to all parents, regardless of their financial condition. A special feeding clinic is maintained for babies with dietetic troubles, and a sick infants' and sick children's clinic takes care of children ill with disorders not dietetic in nature. There is then a general tuberculosis clinic, a central tuberculosis clinic maintained by the Buffalo Association for the Relief and Control of Tuberculosis, and a venereal disease clinic, conducted as an out-patient branch of the Municipal Hospital. Immediately upon the discovery of a venereal infection, the city physician automatically refers patients to this clinic. Dental clinics are maintained in four of the five health center dispensaries, and the University of Buffalo Dental Dispensary is under contract with the department of hospitals and dispensaries to do work for them. Prenatal, obstetric, and postpartum clinics are maintained in cooperation with the district nursing association and a committee of citizens working on a Better Baby Campaign. A feeble-minded clinic in charge of a competent psychiatrist does good work among backward children referred to it by medical school inspectors.

All the dispensary services of Buffalo are free, and the department of hospitals and dispensaries receives the closest cooperation from the department of health, the district nursing association, the Charity Organization Society, and all other philanthropic agencies of the city. The hospital

division provides 870 beds divided among the Buffalo City Hospital, the Municipal Hospital, and the Ernest Wende Hospital. The entire department owns real estate, building, and equipment valued at $1,500,000, employs upwards of three hundred people, and for the fiscal year 1918-1919 made up a budget providing for an expenditure of $427,532.22.

In the future the hospitals and dispensaries under the jurisdiction of the department of hospitals and dispensaries will be conducted in the closest possible coordination with the medical department of the University of Buffalo, and the various departments of the hospitals have been placed in charge of physicians who hold corresponding professorships on the teaching staff of the medical college.

"Buffalo has more than a complete health center plan," says Dr. Goodale. "It has also a complete municipal hospital plan. These two taken together apparently satisfy completely the needs of the community viewed from every possible angle,—preventive medicine, curative medicine, philanthropy, education, and economy."

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The vine-covered entrance to Colebrook Lodge.

Where Nurses Are Nursed

The strain of the battlefield taxes the strength not only of the soldier who participates in the struggle, but that of the nurse whose role is staged behind the lines as well. So it is that Colebrook Lodge has become a "rest house" for American Red Cross nurses, where they may relax after the stress of the struggle and regain the necessary vigor for further work. Situated on a beautiful estate at West Hill, Putney Heath, England, in one of the healthiest river suburbs, the home is an ideal one for the tired and worn-out nurse. Even the stars and stripes at the entrance bespeak a hearty welcome.

Dr. Garvin Decorated for Services in France

Major Albert H. Garvin, chief of the Bureau of Tuberculosis, Medical and Surgical Department with the American Red Cross forces in France, has been decorated with the Medaille d'Honneur de Vermeil of the French government in recognition of his services to that country. Major Garvin, who went to France in September, 1917, was superintendent of the New York State Hospital for Tuberculosis for ten years. He returned to America late in June.

The wisest men say little, but saw wood; how large is your wood-pile?—Friend's calendar.

AMERICAN SOLDIER SHOWS INTEREST IN RETRAINING

Statistics Indicate That Large Percentage Will Take Advantage of Opportunities Offered

It is difficult even yet to reckon the extent of the problem of reeducating the disabled soldier, but from the experience thus far gained the Federal Board for Vocational Education is convinced that the American soldier is more interested in the offered retraining than any foreign soldier has been. Perhaps this is due to the liberality of the provisions made in our country. Judging from the experience of our Allies, about 5 per cent of any given group of wounded men will be given retraining. That would give 10,000 men to be retrained out of the 200,000 wounded, but the board estimates an even larger percentage among American soldiers, as it anticipates that there will be 15,000 or even 20,000 men who will ask for reeducation and placement.

First Chinese Ambulance Surgeon at Bellevue Hospital

Dr. Pang Yuen Tseo (pronounced Say-o) is the first woman of her race to serve as ambulance surgeon in New York. She is a graduate of three United States universities and was sent to this country by the Chinese government in 1909 to study medicine. A woman of exceptional

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Dr. Pang Yuen Tseo on service as ambulance surgeon.

ability, she has won numerous honors at the various colleges she has attended and now divides her time between internship and outdoor ambulance work for Bellevue Hospital, New York.

He whose days are passed away without giving or enjoying, puffing like the bellows of a blacksmith, liveth but by breathing.—From the Sanskrit.

KEEPING UP MORALE AT HOME

Photograph of Convalescent Patient Accompanies Report to Families From Base Hospitals

The commanding officer of each base hospital is responsible for keeping the families or friends of soldier patients informed of their condition. An excellent form originated by Lieut.-Col. W. R. Dear of the base hospital at Camp Lee, Petersburg, Va., has been especially approved by the morale branch of the general staff. On recognition of any case of serious or dangerous illness or the occurrence of any serious injury or performance of any major surgical operation, the ward surgeon or attending medical officer notifies the registrar, the registrar notifies the nearest relative or friend by telegram or mail, as the case may warrant, and daily bulletins are sent until the patient is out of danger. The form used by Colonel Dear for this notification by mail is shown in Figure 1.

BASE HOSPITAL, CAMP LEE, VA.
Date: Oct. 30, 1918

I desire to inform you that John Doe

is sick in this hospital: With Pneumonia

Present condition: Good

Chances for recovery: Good

There is no present cause for alarm. If condition become critical you will be notified by telegram at Government expense.

Very truly yours,
W. R. Dear,
Lt.Col.Med.Corp

Form 49

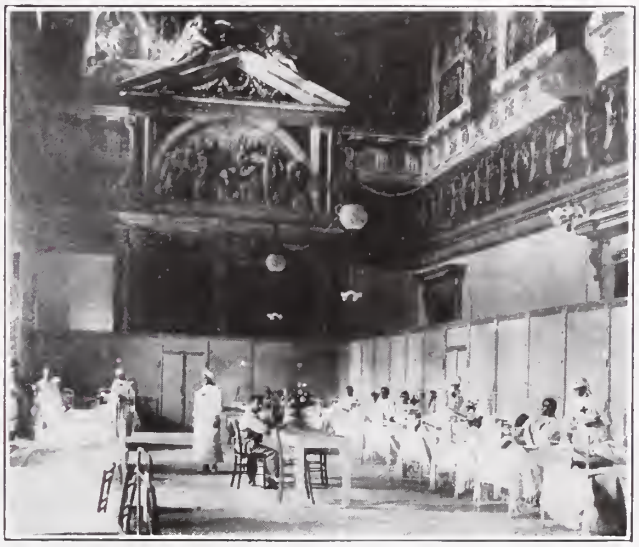
Fig. 1. This form is used to notify the friends or family of a soldier patient in case of serious illness or injury or the performance of a major operation. If the case is desperate a telegram is sent.

Fig. 2. This doughboy's family are not going to worry about him after they see what he looks like.

The condition is expressed as "good," "serious," and "critical," and chances of recovery as "good," "fair," and "doubtful." When the patient has recovered sufficiently, his picture is taken by the hospital photographer, who goes from ward to ward for this purpose. This photograph with the patient's signature on the back is sent to the family as authentic evidence of his improved condition.

Hospital Wards in Ancient Splendor

The psychology of beautiful environment in the recuperation of the sick is a subject that is receiving careful thought among the most progressive hospital executives. The walls of the Quirinal Royal Palace in Rome, which is temporarily housing scores of sick and wounded soldiers, are filled with ancient masterpieces in art and sculpture, and we may well imagine their beneficial effect upon the patients who daily enjoy the splendor of such magnificent surroundings while being nursed back to health. The royal dining room of this palace has now become a mess hall for Italian soldiers.



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One of the luxurious wards in the Quirinal Royal Palace.

TUBERCULOSIS LEADS

Statistics From the War Risk Insurance Bureau Show This Disease Greatest Disabling Factor

The Bureau of War Risk Insurance, working in conjunction with the Federal Board for Vocational Education in the matter of assisting disabled men to obtain such vocational retraining as may be needed by these men, has just made a report on 27,314 claim cases filed with the Bureau of War Risk. The figures are very interesting as showing the distribution of injuries. Tuberculosis of all kinds is reported as 22 percent of the whole, and is the greatest single cause of disability. Wounds necessitating amputation of hands, feet, arms, legs, fingers and toes total only 5 per cent, while wounds not necessitating amputation and miscellaneous wounds all total 31 per cent. Nervous diseases and disorders are 8.3 percent. The figures for these diseases on the preceding report show tuberculosis 30.8 percent; wounds requiring amputation, 3.2; wounds not requiring amputation, 7.9; nervous diseases, 9.6. The changes in these ratios are coincident in time and place in which the disability was incurred, and according to the records 57.7 occurred in camps; 29.7 in battle; 5.7 other sources; the place and source of 26.9 are not stated.

STEAM STERILIZATION OF MATERIAL IN LONG NARROW TUBES

Sterilizing Surgical Dressings, Rubber Gloves and Other Articles—Results of Experiments—Methods Followed

By A. WAYNE CLARK and GUSTAVE S. MATHEY, Research Laboratory, Johnson & Johnson

We have frequently been asked in this laboratory about steam sterilization of surgical dressings packed in deep, narrow containers, such as tubes, open only at one end. It seems to be a common belief that steam can not penetrate or displace air in such container. The question is very much to the point for the reason that in the sterilization of rubber gloves for surgical operations the same condition exists as to the inside of the fingers.

In practical manufacturing work we have not found any trouble whatever in securing complete sterility of gauze dressing material packed in jars or tubes, but in order to make a conclusive demonstration of this problem we have in our research laboratory carried out a new series of experiments designed especially to cover all possible conditions likely to occur.

The illustration shown herewith gives an idea of the experiments designed by us to accomplish the result. In this we used two test-tubes standing in a vertical position as shown in the case of A and B, mouth upward and a similar pair mouth downward, C and D, as shown. E and

Test tubes used in sterilizing various materials, showing various positions. A, B, in vertical position with mouth upward; C, D, with open mouth downward; and E, F, horizontal.

F are another pair placed in a horizontal position. We thought that perhaps steam would displace the air from tubes in one position and not from those in another. Also observe that one of each pair is empty, whereas the other is packed full of gauze in the form of a narrow bandage. We thought that possibly steam would displace air from a tube filled with absorbent cotton or gauze but not from an empty tube. These are regular bacteriological test-tubes about 6 inches long and ½ inch inside diameter.

METHOD USED

In the bottom of each tube we placed an infected tape, which, after sterilization, was removed and dropped into a tube of sterile culture broth and kept in our incubator at blood heat for a week for observation. The sterilization was done in our research laboratory apparatus, a regular hospital-size machine, viz: steam pressure fifteen pounds on jacket.

Tubes placed in chamber in positions shown in illustration and door closed; steam admitted to chamber and let stream through, going out at bottom; when all air was out, as shown by cessation of bubbles on immersion of bottom outlet pipe in water, the outlet pipe was closed and pressure raised to fifteen pounds. This was held for thirty minutes. Pressure was then blown down, door opened, and tubes removed.

On this test we have to report that there was no growth in any case. Therefore, all of the contents of the tubes must be considered completely sterilized. These tubes were plugged with ordinary cotton stoppers which are not shown in the illustration. The black line at the bottom of each tube represents the position of the infected tape. (See illustration.)

Relative to the tapes used, we may say that they are the same as used in all our research work and testing of the sterilization processes used in the manufacturing plant which we represent. We use cotton tapes ¼-inch wide by 1½ inches long. These are thoroughly boiled in water to remove any sizing and then soaked in a water suspension of spores of *B. subtilis*, scraped from an agar surface. These tapes are then allowed to dry in the room and lie around in it for several days in order to accumulate any stray bacterial spores that may be floating around in the air.

In all of our testing work of this kind we use *subtilis* spores for the reason that they represent what is generally conceded to be the hardest to kill of any known form of life. We check the resistance of these tapes by immersing them in boiling water and removing at intervals of one minute. We generally find them to be killed by two minutes boiling and to live after one minute's boiling.

The very great penetrating power of steam as shown by the sterilization experiment illustrated and described herein, is not new to us in this laboratory but it apparently is not appreciated by many. In this connection it is perhaps well to call attention to the fact that in this work we use no vacuum to assist penetration. For years we have not been using vacuum because we find that a quicker and more certain way to drive the air out of a sterilizer is by letting the steam stream through it. If this is done until all the air is found to be out of it, by testing it at the outlet pipe at the bottom, the results will be entirely satisfactory. We have advocated this for some years in talking with nurses and other representatives of hospitals, etc.[1] There is a very great source of danger in placing faith in the use of vacuum for removing air from sterilizers previous to the admission of steam. If we could produce a perfect vacuum no doubt the results would be satisfactory, but one can not do so, and the best that can be done under ordinary conditions removes about one-half of the air. On the other hand, by letting the steam stream in at the top and out at the bottom of the sterilizer with both valves open it is a simple matter to blow out the air, provided sufficient time is taken to do it. Unless the air is removed, sterilization can not be accomplished.

An explanation of the tremendous penetrating power of steam has been given in a very illuminating way by Dr. F. W. Andrews in his book on this subject.[2] Dr. Andrews says:

"Suppose steam, at ordinary atmosphere pressure, be brought into contact with a pillow or mattress. It immediately undergoes condensation on touching the outer surface of the colder object, and in so doing parts with its latent heat, which is more than sufficient to raise this outer layer to 212 F. In condensing, steam shrinks immensely in volume; a cubic foot of steam condenses into about a cubic inch of water; so that a partial vacuum is formed by condensation, into which fresh steam rushes, repeating the process in the next layer of the pillow or mattress, and thus, layer by layer, the entire object is raised to a temperature of 212 F."

1. Some Facts and Fallacies of Sterilization. A. Wayne Clark, THE MODERN HOSPITAL, June, 1917.
2. Lessons in Disinfection and Sterilization. F. W. Andrews, M.D. 2nd Ed. 1907. J. & A. Churchill, London.

DEPARTMENT OF NURSING

Conducted by ANNIE W. GOODRICH, Dean Army School of Nursing and CAROLYN E. GRAY, R.N.

Please address items of news and inquiries regarding Department of Nursing to CAROLYN E. GRAY, R.N., Secretary of the New York Board of Nurse Examiners, 135 E. 45th St., New York City.

PRESENT-DAY PROBLEMS IN NURSING*

Futile to Attempt to Relieve Shortage of Nurses by Lowering Standards of Education or Training—The Only Way Is to Improve the Training School

By REUBEN PETERSON, M.D., President Michigan State Board of Registration of Nurses, Ann Arbor, Mich.

While I am deeply appreciative of the honor conveyed in the invitation to address this large body of graduating nurses, it must be confessed that I have been somewhat perplexed in my choice of a subject. It has been my privilege to address many classes of graduating nurses during the past thirty years, and it would have been an easy matter to dig into my barrel, as clergymen are obliged to do on occasion, and fish out one of my former masterpieces. This could have been dressed up for the occasion and no one would have been the wiser, since I am confident that my remarks were never remembered beyond the time the ice cream was served at the receptions which followed the exercises.

It is easy, so easy, for a physician to admonish a nurse as to what she should or should not do. These admonitions are set forth in the most kindly spirit imaginable, but the underlying patronizing quality is unmistakable. I know, because I confess to having been one of the guilty; and may I tell you how I have been cured and why my feeling of superiority has received such a shock? My reformation has been wrought by constant association during the past few years with some of the leaders of the nursing profession and by learning what they have accomplished and what they are striving to accomplish.

You, who are about to begin the practice of your profession, can well be proud of your leaders, and, because from ranks like yours must come the future leaders and because you can not too soon become interested in matters vital to the welfare and progress of your profession, I propose to discuss some of these things this evening. It speaks well for the alertness of your profession when one must make a selection of the problems now under discussion by the nursing world, for it would be hopeless to attempt to cover the entire field in the time at my disposal. I shall take for my subject, therefore, the present shortage of nurses.

Undoubtedly at the present time there is a shortage of nurses—not an actual but a relative shortage due to the increased demand on the part of the public for trained nurses. This is the highest compliment which could be paid the members of your profession, for the public does not demand a group of people who have proved themselves inefficient. In 1880 there were 323 pupil nurses in the fifteen training schools in this country. Today there are over fifty thousand pupil nurses in over fifteen hundred training schools. While there are over one hundred thousand graduate nurses, registered and unregistered, in the country, still the cry goes out for more nurses. The individual who has been accustomed to employ whom he pleases, because he has the means with which to pay for such services, is shocked and indignant when a member of his family is taken ill that he can not secure at a moment's notice one or more trained nurses. He was uninterested in the question of supply and demand of nurses when there were as many as one hundred and fifty nurses waiting call in a single nurses' registry. That was a question for the young women themselves to settle. If so many of them took up trained nursing because of the rich emoluments accruing from such work that many were idle, that was their affair, not his. But when the shoe was on the other foot, when he could not secure a nurse at any price, that was a different matter. Something was wrong. The trained nurses had formed a trust in order to keep up prices. They were keeping the good, kind, practical nurse down. The whole matter must be changed by legislation—a favorite remedy, by the way, for all ills. A law must be passed recognizing the practical nurses. There should be plenty of these nurses so that the poor people could have their services and leave the trained nurses for the well-to-do who must have skilled service. How selfish, and yet how human!

The shortage of nurses at the present time is due to causes arising from motives diametrically opposed to those outlined above. The war took a great many nurses, some twenty thousand. These were the best type of nurses, for only those with the highest credentials were enrolled. The War Department may have erred in some matters, but it knew what it did not want so far as nurses were concerned. In spite of the fact that the Surgeon-General sent out a call to the American Red Cross for twenty-five thousand nurses to be available January 1, 1919, the standards for admission to the service were not lowered. Graduation from accredited schools and state registration were still required in spite of the efforts to lower the standards.

It goes without saying that the effects of the great world war have been far-reaching. The nurses, like all the rest of the nation, were overwrought, keyed up emotionally. Those who for one reason or the other were unable to enroll for war service felt humiliated at being merely private-duty nurses and sought service in agencies which had to do with the public welfare. Thus there was an immense increase in public health nurses of various kinds, of social service nurses, antituberculosis nurses, infant welfare nurses, and nurses to aid in the various Red Cross activities.

Again, one has only to read the annual reports of hospitals to realize the great change which has taken place in the management of these institutions during the past decade. Trained registered nurses are listed as superintendents, assistant superintendents, housekeepers, dietitians, anesthetists, technicians, in addition to those who made up the personnel of the training schools proper. The personnel of the staffs of the training schools has been greatly increased during the past few years. Competition among the schools and state-board-of-registration legislation has brought about a marked change. Wards are in charge of graduate nurses, day and night supervisors have been increased, so that in the aggregate many thousands of nurses are required for the maintenance of

*Address delivered before the second annual commencement, Detroit Hospital Training Schools, Detroit, May 14, 1919.

the seven or eight thousand hospitals of the country. In fact, when we consider all the varieties of occupations of the trained nurses today, the wonder is that there are any remaining for private duty.

There is, then, a relative shortage of nurses in the country; that is, there is a demand for more nurses than the schools connected with hospitals can enroll and train. How can this condition be changed so that all classes of the community can be nursed when ill? It has been claimed the number of nurses in the country can be increased in four ways:

1. By lowering the educational standards for admission to the training schools.
2. By shortening the course of training from three years to two years or even one year.
3. By providing training for two classes of nurses, one for the educated woman destined to become the registered nurse, the other for another type of woman to be known as a "nurses' aid," "practical nurse," or "licensed attendant."
4. By changes in the training schools, the hospitals, or both, by which more educated women will be attracted to trained nursing as a profession.

1. *Lowering the educational standards for admission to the training schools.*—This would be a suicidal policy so far as your profession is concerned. The lowering of the standards below the eighth grade might increase temporarily the number of pupil nurses but it would mean a decrease of applications from those who have received a better education. Certainly one of the reasons why more educated women are enrolling in our training schools is that the educational standards have been raised during the past two decades. Yours can not be classed as a profession unless its members are educated, for it is education that distinguishes it from a calling or vocation. And the struggle for higher educational standards for your profession must be made by the nurses themselves. Outsiders will not interest themselves except to try for various reasons to keep the standards lower. You can learn much from studying educational standards in the medical profession during the past quarter of a century. The fight for higher educational requirements for the medical schools and for the practice of medicine has been made by the physicians themselves against all kinds of selfish interests. Now a medical school would be ashamed to matriculate a student who had not had a high school education, and the large majority of schools require one or two years of college work for admission.

A poorly educated woman may make the finest kind of nurse—I have known many such nurses—but she is a good nurse in spite of her educational handicap, not because of it. Again, the college graduate may be a failure as a nurse, notwithstanding her superior education. We see such misfits in all professions, in all walks of life. To cite such examples of success or failure means nothing, proves nothing. If there be anything at all in education, and we all believe in it, else the illiterates would preponderate in the nation, it means that its possessor has a decided advantage in his or her life's work. He or she may not succeed, for there are many factors besides education which make for success. But at least there is an advantage at the start.

If you would advance your profession, welcome and strive for any reasonable increase in educational requirements for admission to your training schools. See to it that the educational requirements for state registration are gradually raised until no poorly educated woman can legally claim the title of registered nurse. To raise your educational standards is a step forward; not to raise them a step backward. The future position of your profession is in the hands of pupil nurses like yourselves and the thousands who are graduating this year, and I am confident you will not prove unequal to the task before you.

2. *Shortening the training school course.*—This has been suggested as a short cut for remedying the present shortage of nurses. It has been argued that, if many of the things the pupil nurse is required to do in her training were eliminated, she could be trained in two years or even in one year. It is claimed that she is exploited by the hospital, made to perform menial tasks such as could be done by maids or porters, and that much of this repetition is time wasted for the pupil nurse. What is your answer to this suggestion, these statements? You ought to know, for you have just finished your training. Where would you shorten the time of your training? On the medical service? You are to be congratulated if you have learned thoroughly in a number of months all that is expected of a nurse regarding the handling of medical patients. As I look back twenty-five years, it was much easier for a nurse to become proficient on the medical service in a shorter time than it is today with the great advances which have been made in internal medicine, advances which carry with them an elaborate technique. You surely would not shorten your surgical or gynecological service. Many of you no doubt regret you could not have remained longer on these services in order to perfect yourselves along certain lines. Some of you may not have liked your operative room experience, for that kind of work may have been somewhat distasteful to you, but you can not think you would forego that experience or that you could have learned it all in half the time—and so one might go over all your services with much the same result. It is only by constant repetition that one becomes skilled in any line, and there is always drudgery connected with every occupation or profession. One might as well say that the surgeon has learned it all when he has performed the same operation three or four times or that the medical student has nothing more to learn about the heart when he has ausculted a few cases.

Routine work may become drudgery. It may go for nought, and one may learn nothing from it if it is performed with a certain attitude of mind. This is characteristic of some workmen these days. After watching them work, one wants to shake them or do something worse to them. But that should not be, and is not, in my experience, the attitude of the average pupil nurse. She is anxious to learn and does not perform her tasks mechanically.

A way has been suggested and is being worked out in some training schools by which the course may be shortened by a year, although this plan does not really shorten the course so much as rearrange it. I refer to the plan of giving a certain number of months' credit to the student who has learned the fundamental theoretical subjects prior to her entrance to the training school. This idea carries with it central schools where the fundamental studies of the training course are to be taught and the nurse afterwards sent to a hospital or hospitals for practical experience. Such a plan has many obvious advantages, of which the principal one is that under such a scheme a pupil nurse could be grounded thoroughly in her theoretical work under much better conditions than in the ordinary training-school course where she must study when worn out by a hard day's work.

There is nothing particularly new in this plan, except as applied to the education of nurses. The medical schools are practically under this system now, for much that formerly formed a part of the curriculum of the first two

years of the medical course is now required before the medical student matriculates. This gives more time in the junior and sophomore years for the more strictly technical medical subjects such as pathology and physical diagnosis. There would seem to be no serious objection to developing this plan for nurses; on the other hand, it would seem distinctly advantageous. Any arrangement which will tend to make the training schools approximate educational institutions will go a long way toward solving nursing problems.

It must not be forgotten that primarily training schools for nurses were established to do the work of the hospital and that very little beyond instruction in the practical part of nursing was attempted. The hospital staff gave a few lectures to the nurses, mostly poor lectures as I recall my efforts, for the doctors did not know exactly what was expected of them and mostly talked over the heads of the poor tired nurses who nodded in their seats. Such a system of education for the nurses would have been a failure had it not been for the far-seeing wisdom of the leaders of the nursing profession who have fought in season and out in the face of the greatest opposition and under immense disadvantages to make the training schools really educational.

Thus it has come about that trained-nurse instructors who knew how to teach have taken the place of the members of the hospital staff. Hours are devoted to study and instruction now which it would have been thought impossible to take from the actual care of the patients some years ago. In most of the training schools there are class rooms for teaching, an unheard of thing some years ago when the nurses were brought together for instruction in dining rooms, rooms in the basement, wherever space could be found.

With these improvements in institutional methods has come a demand that the nurses should be taught more during their training. The social service worker, the school nurse, the antituberculosis worker, the public health nurse argue that the fundamentals of these various nursing specialties be given nurses in the training school course. This is history repeating itself; the grammar and high schools, the colleges and universities, including the technical schools, are subject to the same importunities. In self-defense after much experimenting they usually fall back upon teaching the essentials, the fundamentals, leaving specialties to postgraduate study.

3. *Training two classes of nurses.*—This heading has been deliberately worded, for no matter how much camouflage may be used, that is exactly what it means. The advocates of this plan practically put it this way: There is at present a shortage of nurses. There are many women who would take up nursing if they weren't obliged to spend three years in a training school. We will arrange for a shorter course of training for women of inferior education or for those who are unable or do not wish to spend three years in training. We will call them "junior nurses" and give them state recognition. This class of nurses will be separate and distinct from the nurses who are being trained now, the nurses who are entitled to state registration and can append R.N. after their names. The short-cut nurses, the one-year nurses, the junior nurses will be entitled to append J.N. after their names. By this plan there will be more nurses, and the poor people or people of very moderate means will be provided for; that is, they can be nursed by these partially trained nurses for fees much smaller than those charged by the registered nurses, who naturally, because they have spent so much time in their training, are high priced.

I believe I have given a fair presentation of the claims of those advocating junior nurses. I have even omitted dwelling upon the special bad feature of the junior nurses' bill introduced in the present legislature, the direct slap at the nursing profession in Michigan in that the bill provides that these junior nurses shall not be under the State Board of Registration of Nurses, which represents the Michigan nursing profession, but under the State Department of Health, on which there is no nurse representative. Be that as it may, let us consider this plan and see what it will accomplish, what are its advantages and its dangers to the public at large. For the position of the nursing profession on this and similar measures should be open and above board, and there should be no veiled antagonism to any plan which will benefit the public.

In the first place, such a scheme would not accomplish what it starts out to do, for, after the first rush of those who call themselves nurses to be registered under the law without examination, there would be no material increase of nurses under this plan. There would be an increase of women who would be willing to give up a year to training for the sake of state recognition, but this increase would be offset by a diminution in applications to the regular training schools, for who would be anxious to give up three years to a profession in which a junior can be trained in one year? The word "nurse" and even the title "registered nurse" would be immensely depreciated in value. The public would be hopelessly confused and would not discriminate between R.N. and J.N. You will be surprised, those of you who look forward to becoming registered nurses, how little significance the title "R.N." has with the public as yet. The title "M.D." after many years has been drummed into their heads, so they do not think it means "mule driver" or something else, but, for the majority of people, J.N. would mean as much or more than R.N.

Not long ago a woman came to my office asking for employment as a nurse, handing me a card on which she was labeled as a "professional nurse"; probably the next step would be P.N. on the card. Upon inquiry it turned out she had never seen the inside of a training school but had acquired her training as a "nurse" through a correspondence school, and a significant fact in this case was that for nearly a year she had been charging twenty-five dollars a week for her services. According to the sponsors of the junior-nurse scheme, had she been entitled to append J.N. after her name, her only ambition would have been to nurse poor people or people of moderate means for ten dollars a week. Ask the poor people whether they would like to have a junior doctor treat them, one who had had a year's training. Yet to my mind a so-called "junior nurse" would be in a position to do infinitely more harm, for she would be recognized by the state and would be with the patient all the time, whereas the junior doctor would only call occasionally.

For the safety of the public there should be only one recognized nurse and she should be the trained nurse or registered nurse. Unfortunately we have no distinctive substitute word for "nurse" as we have for "doctor," else it could be employed. In order to distinguish the doctor of medicine from the corn, herb, or Indian doctor, it is possible to speak of him as a "physician," which carries with it the title "M.D."

Thus you should guard the word "nurse" so that the public will not be confused or deceived. I am not opposed to training another class of women for certain specific duties which will relieve the trained nurses of a great deal of routine work. In fact I am heartily in favor of it, just as I am an advocate of training nursery maids, but

I do object to calling these women "nurses" or giving them state recognition as nurses. I have no objections to calling them "nurses' aids," "trained attendants," or "trained helpers," or anything else that is right and proper, but in the interests of the public, I protest against the word "nurse" being used.

It must be distinctly borne in mind that there is nothing in the Michigan nurses' law which prevents any one from caring for the sick poor or the moderate wage-earner. The only stipulation is that such a person can not style herself a "registered nurse" or append "R.N." after her name. Hence, so far as the law is concerned, there might be thousands upon thousands of women engaged in caring for people who are sick yet are not able to pay the fees of the registered nurse. The fact that there are not these thousands demonstrates that such practical helpers are not content to care for the sick poor at a small compensation. On the other hand, they are handicapped in their struggle to compete with trained or registered nurses by the fact that people want only the best, the trained worker, the trained and registered nurse.

It has been abundantly shown during the recent influenza epidemic that the extortionate charges came not from the registered nurses but from the so-called "practical nurses." It is well known that the fees of the untrained helper have steadily risen during the past decade, out of all proportion to the increase in the emoluments of trained nurses. State recognition of women partially trained to care for the sick and the resulting confusion in the minds of the public would have only one result: the fees of the partially trained worker would tend to approximate those charged by the trained nurse and the distinctive object of the plan, providing for the care of the sick poor or those of moderate means, would fail.

Again, it must not be lost sight of that the junior nurse would never be satisfied to live under the stigma of being inferior, for that is not human nature. The career of the trained nurse not being open to her, either through lack of education or on account of other circumstances, she will strive consciously or unconsciously to bring the other class to her level.

Thus you, as educated nurses who have devoted three of the best years of your lives to the work of being trained for a profession, not a mere calling, should think clearly on this most vital question. There are ways of providing for the trained attendant which time prevents me from considering at length. Let the future and the wisdom of your thoughtful leaders determine how best this shall be done. Suffice it for you to oppose strenuously anything which will have a tendency to make the title R.N. less dignified or honorable, and you will do this not from selfish reasons but because by so doing you will be protecting and therefore serving the public.

4. *Changes in the training schools, hospitals, or both, by which more educated women will be attracted to trained nursing as a profession.*—Until such time as hospitals and training schools realize the situation confronting them today and make certain changes to meet new conditions, there will continue to be a shortage of applicants for our training schools. First of all, the hospitals must face the fact sooner or later that, in order to make trained nursing attractive to young women of education, the schools for nursing must be made educational institutions, the proper care of the patients being one of the things which the school is under obligation to teach the pupil nurse. In most hospitals this is not the case. The nurses are there to care for the patients, the pupil nurses being taught as much as their superintendent of nurses can arrange for.

The anomalous situation of the training schools of the country may be realized if we think of the medical student being placed in a situation similar to the pupil nurse. The medical educators would not for an instant agree to have the medical student remain four or even two years in a hospital for room, board, and so much per month, performing hospital tasks many hours a day and being instructed when he is not so employed. Nor would the medical student agree to this arrangement. It so happens that war conditions illustrated this very well. So many graduate interns entered the service that the University Hospital was obliged to appoint undergraduate interns in order that the intern work of the hospital could be carried on. These temporary interns received room and board and did what hospital work they could *after* their regular prescribed work in the medical course had been performed. Necessarily because under this arrangement they could do only part of the intern work, there had to be two or more undergraduate interns for every graduate full-time intern who entered the service. Under the arrangement suggested above the pupil nurse would be expected to do as much work for the patients as her school work would permit. The hospital would be obliged to supplement the work of the pupil nurses by employing graduate nurses as needed, or increasing the number of pupil nurses so that by shifts the hospital patients could be cared for.

At once the thought arises, how can this added hospital expense be met? For obviously it would be a great additional expense to the already overtaxed hospital budgets. This also can be arranged, it seems to me, provided the training schools be made strictly educational in character, by doing away with the compensation the hospital is accustomed to pay its pupil nurses. This may sound radical, but is it not the proper way of solving the problem? If the training school is to be educational in character, the pupil nurse would certainly be willing to enter this educational institution under the same conditions she would any other. If she desires to become a teacher she pays her expenses at the high school, normal school, or university because experience has shown that the courses have been arranged in such a way and the instruction is such that this expenditure will be made up in the years to come. A student in any of these institutions would immediately think something was wrong if she received board, room, and a monthly stipend. The hospitals which give their interns a monthly wage are usually the ones avoided by the young medical graduate. He fully realizes that he is losing by such a bargain and that the hospital is paying for his services because it can not offer the proper clinical experience in addition to his room and board.

Under this plan, the training schools, being educational in character, would undoubtedly be the recipients of endowments and scholarships which would take care of the needy student. Under the present system the hospital receives the endowment and gives to the training school what it deems necessary. With funds at its command the training school could offer ideal courses, using the hospital as its laboratory in the best sense of the word. It could arrange the hours of study and practical work so that the pupil nurse would not be physically worn out and unable to profit by her efforts.

If all this can be brought about, or a large part of it, there will be more applicants for training than can be cared for. Parental objection to trained nursing as a profession, which has always had a great influence in diminishing the number of applications, will be removed. Trained nursing with its numerous specialties all with

one object in view, the care of the sick and suffering and the betterment of mankind physically, mentally, and morally, is in a better position to attract recruits than any other profession, enough to meet all needs, if only its true character and worth be made known and its future course be wisely guided.

I can not close without a word of tribute to the Michigan nurses who served their country so faithfully during the late war. Without rank, sometimes without proper recognition, exposed to the greatest dangers, without complaint, and actuated only by a sense of duty, they acquitted themselves in the manner we confidently expected. To the memory of those who failed to return from overseas or who gave up their lives on this side of the water, we pay humble tribute. The loss of one of the great leaders of your profession who addressed this assembly only a short year ago seems at the present moment irreparable. I am confident from what I know of her character and life that the greatest tribute you can pay her will be for each and every one of you young nurses, now starting on your life's career, to support in thought and deed those nursing ideals and principles for which she sacrificed her life.

* * * *

THE RESULTS OF ORGANIZED PUBLICITY IN INTERESTING THE PUBLIC IN NURSING*

Serious Shortage of Pupil Nurses in All Training Schools —What the Training School Has to Offer Students— Various Methods of Publicity Discussed

By CAROLYN E. GRAY, R.N., Secretary of New York Board of Nurse Examiners, New York City

Organized publicity applied to nursing was a war-time measure and today our main interest is not so much in the results which *were* obtained, but rather in the question of publicity in general and what results we may expect to obtain from it in peace times. The splendid publicity work carried on by the nursing committee of the Council of National Defense plus war-time enthusiasm brought to our schools such large numbers of young women that only a year ago our main problem was to provide accommodations for larger classes than had ever before been admitted. This required much careful planning and many adjustments which were hardly complete when the epidemic of influenza swept the country. Possibly if we had known what October and November were to bring us, we could not have provided for the emergency better. Hundreds of our nursing schools were filled with probationers and it will always be to the credit of these recruits that they faced the terrible ordeals of the epidemic with courage as great as that displayed by our soldiers in the front-line trenches.

When the terrors of influenza had somewhat abated and we were struggling to get our classes started and live up to schedules which had been temporarily abandoned, the armistice was signed. Welcome as this was, it entirely reversed our problem, and many of our students who had stood bravely at their posts all through the awful days of the pandemic, lost interest and enthusiasm to such an extent that they left our ranks. To my thinking the most remarkable thing was that the fascination of nursing was strong enough to hold so many, rather than the fact that the loss of war-time enthusiasm and returning fiancés took a smaller number from our schools. However, I do not belittle this problem, which, from the standpoint of the superintendent of a nursing school who has witnessed her classes grow smaller because of the gradual loss of war-time recruits, has been a cause of worry and anxiety. Added to this, there has been a very decided drop in the number of applicants and, from many parts of the country, we hear that the nursing schools are facing a serious shortage of pupils, which, in hospital terms, means a lack of nurses to care for the sick and carry on the multitudinous tasks which, by some strange process of reasoning, are classed as "nursing."

The lime-light of publicity which flooded our schools perhaps more completely than ever before showed many weak points in our system for which various members of this league are seeking remedies. I interpret the purpose of this paper to be the question whether publicity will again help us to fill our schools with the pupils we need so badly.

Looked at from the proper standpoint, we offer *education* in return for definite work, and this we must stress and emphasize because any attempt to attract pupils on any other than an educational basis means, to my thinking, complete failure. Education for a profession and for life is, in terms of advertising, the goods we have to sell. Always when we are facing a shortage of pupils there is danger that this may be lost sight of and we are all familiar with the suggested panaceas of "short courses," "lower standards," "increased allowance," etc.

Fortunately we have a goodly number of schools that never lose sight of their educational function and these illustrate my point that the appeal of nursing education is quite as potent to fill our schools as various other forms of education are successful in filling colleges and universities.

This brings us to the anomalous position which our schools occupy. They are never listed with other schools and can not be found in catalogues, books, or any of the printed records where educational opportunities are usually sought. Moreover, the educators of this country are in many instances woefully ignorant of what we offer, and still think of our schools in terms of apprenticeship rather than education. Despite these facts our attitude in regard to advertising is one of shrinking and a feeling that it is not dignified. I believe I do not exaggerate when I state that many of us were "horrified" the first time it was suggested to us that we advertise our beloved school. Yet it is necessary for all schools to advertise.

Universities, colleges, professional and private schools all advertise systematically. They suffer from no false standards and are frankly competing to attract the best young men and women of the country to their doors. Our daily papers and magazines devote many pages to advertising the claims of universities and colleges that already are far better known than even our best nursing schools. And the advertising is done by experts who know the psychology of the art and use it effectively. College festivities, graduation exercises, and various social functions are always well written up, because they furnish interesting news items. While primarily this is not advertising, it serves the purpose of publicity in the best sense of the word. In comparison with this, we find not a word about hospital training schools. They are not listed as educational institutions, are not found in the advertising pages of papers or magazines, and are rarely mentioned in the news items. The interesting articles on nursing published in the daily papers during the war, were red-letter events and were part of a regularly organized campaign.

Another comparison that is of interest is the relative number of students required by nursing schools. In the United States there are approximately 48,000 to 50,000 pupils in training and from 14,000 to 15,000 pupils enter each year. This total of 15,000 students we must enroll each year is far in excess of the total enrollment in any

*Read before the National League of Nursing Education.

other group of schools. There are few professions whose annual number of graduates even approaches the number leaving our schools *annually*.

All this is relevant to the existing condition which is that the nursing schools are today in need of a large number of pupils and are making no systematic efforts to inform the public of the advantages which nursing education offers. It would seem that we have reached the parting of the ways and will have to rid ourselves of the obsession that it is undignified to advertise, and, because of our great need and past failure to use this means we must make a serious study of how best to make it serve our purpose.

It is true that in a few instances individual schools, whose needs have been great, have advertised successfully, and perhaps I can best tell of the methods that have been used to increase the number of pupils in a large school.

1. Descriptive booklets, attractively bound and printed, showing a series of pictures of the outside of the hospital, nurses' residence, surroundings, etc., also a set of interior views of the interesting things one might show a visitor on a tour of inspection. Each picture was accompanied by a few lines of description. A detachable printed postcard was inserted at the end, so that if the booklet proved interesting, the reader could use the card to request further information. In response to these cards a circular of information was sent out. This went into detail regarding the theoretical and practical course offered and attempted to answer the usual questions that applicants ask. The picture booklets were printed in February and in March distributed to the reading rooms of the high schools, public libraries, women's clubs, religious societies, and by means of alumnae members, over as wide an area of country as possible. These attracted attention and brought results which more than repaid the initial cost of getting up the books which had been considerable. Moreover, the use of these books simplified the office work to a very great extent and in one instance made it possible to dispense with the services of one of the two clerks that formerly had been kept busy.

2. Interesting articles in various religious publications. Several were written by pupil nurses. This is perhaps the cheapest and most effective method of advertising, if one is fortunate enough to have pupils gifted with literary ability. The testimony of pupils in training carries weight with parents and guardians, and the pupil is nearer the view point of the applicant and knows the things that will make the strongest appeal to a prospective beginner.

3. Posters. A few schools have used posters of quite large size, showing a few attractive pictures, with a brief but interesting statement regarding the school. These posters are sent far and wide to high schools and are displayed on the bulletin boards. They have proved a successful means of interesting young women, and are cheaper than books.

4. Page advertisements in school publications and such magazines as the *Young Woman's Christian Association Monthly* and the *Extension Magazine* of the Catholic Church. The writer of these advertisements must be familiar with the psychology of advertising, should use pictures and make sure the page is too attractively gotten up to be skipped by the reader. It is a good plan to have reprints of these pages and send them to the various Young Woman's Christian Association branches, including the summer camps, asking that they be posted on the bulletin boards. Considering the initial outlay this proved very profitable advertising. I would like to emphasize the advantage of the full page advertisement over the usual one of six or ten lines, inserted among many similar ones, because the latter did *not* bring results even when inserted in rural and Canadian papers.

5. It seems probable that our main source of supply must come from the high schools and colleges of the country, consequently our profession must be kept in the foreground so that these pupils in thinking of what they intend to do when school days are over, will at least know about nursing. In many parts of the country representatives of our profession have made addresses in the high schools. As one of these representatives I made some sad mistakes and for a time was quite discouraged until I learned the method of approach. Later I came to the conclusion that addresses in the high schools are perhaps the very best way to arouse interest that will later bear fruit but it is not the quickest way to secure immediate returns.

The first, second and third years I attempted this I did not get any pupils, but since then each year has brought a number and, in several instances, they have come from high schools where they heard the address given as long as four years ago. I remember quite distinctly how well prepared I felt as I wended my way to my first high-school address. I had listed all the advantages of our school, and felt quite confident I had the right method of approach. Imagine my discomfiture to face what seemed like a sea of blue and pink bows adorning the heads of *mere children*. These children were surfeited with classes and lessons, the educational appeal fell flat. They were far more interested in "doing things" and a few stock stories of hospital happenings were all that saved me from utter failure. I decided never again to attempt such a thing, and never did. Before I made another address I secured a set of slides illustrating a visit to the hospital and simply attempted to describe what the pictures showed.

I closed my address with an invitation to visit the hospital and one busy spring entertained ten groups from various high schools. These groups came at stated times and every effort was made to try and show them (as nearly as practicable) what had been shown on the screen. It took time and patience to entertain them and answer their questions, but it resulted in a far better attitude on the part of both the pupils and the teachers who accompanied them and cleared away many misconceptions and prejudices.

Miss Nutting, Miss Wald, and Miss Goodrich, who have made addresses in colleges could tell you better than I about the result of their efforts. As evidence of their success I submit the large number of college women enrolled last year.

During the time I was engaged in carrying on this publicity campaign, I began to wonder whether the stereotyped letters sent out in answer to inquiries were all they might be, and thought I would like to know what other schools were doing. With the help of a friend I sent inquiries to thirty schools and I assure you I learned much from the letters and literature I received. We women who are superintendents of training schools are all too often so busy that office work and letter-writing is not as important from our point of view as it is from that of the applicant. Some of us need to learn the value of courteous and cordial letters that will encourage timid writers to persevere. We who know how much nursing has to offer should not hesitate to attract prospective pupils in every possible way and I think you will all agree with me that form letters with a rubber stamp signature are not apt to be tempting.

As a result of my personal experiences I am a firm

believer in advertising and also have learned that a knowledge of nursing does not necessarily make one a successful advertiser. I enjoyed my experiences and learned much, but am convinced that one who knew the art of advertising could have applied that knowledge to my problem with a larger measure of success than I had. The few facts I learned were paid for by costly mistakes, and even yet I dislike blue and pink hair ribbons.

The exigencies of the war taught us the value of organized publicity and as this is costly it would seem to be justified only in time of great need. Some of you I know will consider the present a time of great need, and I am inclined to agree with this opinion. If the hospitals all over the country would share the expense, it might not be prohibitive. A publicity expert would map out a campaign and would see to it that interesting articles on nursing subjects were published simultaneously in a large number of papers. By means of pamphlets similar to the splendid ones written by Miss Isabel M. Stewart of Teachers College the principals of high schools and the deans of colleges could be reached and in many, possibly untried, ways we might be able to arouse and develop an enlightened public opinion regarding our hospitals and schools that would prove a tremendous asset. Many of us who have struggled with problems that should be a matter of community concern and knowledge, and have realized the ignorance of the public regarding these problems, have come to question whether the highest form of loyalty to our beloved schools consists in keeping all knowledge from the public.

In our effort to attract pupils, improve standards, and secure legislation, public enlightenment of the right sort would prove the greatest help in the world. Are we as a professional group wise in continuing to ignore this asset?

CHINESE COOLIES IN FRANCE WELL CARED FOR

Extensive Work Required Behind the Lines Called for Cheap Labor—Large Number of Chinese Employed —Big Hospital Needed to Care for Them

The largest hospital in the world exclusively for Chinese was constructed in France during the recent world war. One hundred and forty thousand coolies who were brought from China for the more arduous labor were cared for in sickness in this infirmary. The site was in the village of Noyelles, midway between the mouth of the River Somme and Abbeville. The Chinese base hospital was built on a hill about one mile from the village. Like other hospitals, stress of great need expanded its capacity from the fifteen hundred patients it was originally intended to accommodate to eighteen hundred when required.

The staff consisted of sixteen foreign doctors with three hundred nurses and other attendants. Colonel Gray, formerly of the British Legation, Peking, was chief of staff and many of the officers were medical missionaries from China. The buildings used were substantially constructed for this purpose, being of wood, iron, and tar paper. Some even were sheathed inside with pressed paper. Plenty of windows and a stove for each building furnished light, air, and heat. According to Chinese usage the structures were but one story high.

The most modern equipment was furnished despite the exigencies of war. There were surgical and medical buildings with special wards for tuberculosis, influenza, trachoma, venereal disease and other infectious and emergency cases.

Special quarters were provided for the insane patients, numbering about sixty. A detached area enclosed by a high barbed-wire entanglement was thus used, being well guarded at the entrance. The isolation camp for lepers was another interesting and depressing part of the hospital. About sixteen cases of leprosy were discovered and thus segregated.

A well-kept graveyard, a necessary adjunct, was the resting place of three hundred and fifty of the laborers. At the head of each grave is the usual small white cross bearing the identification data. A memorial arch will be erected to these humble heroes in Peking, commemorating their supreme sacrifice. One coolie gave a third of his month's pay for this purpose.

The Y. M. C. A. here as elsewhere looks after all people and the Chinese were not excepted. There are nineteen centers in the British Expeditionary Forces where the "Y" works. In the Lille region there were sixteen canteens with a meagre staff of but five men with about eighty-five Chinese and foreign secretaries. The effective work of this organization is attested by the results among this strange people, restoring morale when it was sadly impaired. One company became restive and was giving considerable trouble to the officers, drinking, and gambling, and quarreling among themselves. Within three days after the Y. M. C. A. took charge and opened a canteen the improvement was marked. Ten days later the commanding officer personally expressed his thanks to the secretary in charge for the excellent work accomplished.

The Chinese have proved so necessary for a certain class of labor that they will be retained in France for some months further, which will mean keeping this great hospital open for a year more.

Dr. W. W. Peters, secretary of the China Public Health Committee, from whose letter, published in the *China Medical Journal*, the foregoing abstract has been made, pays a tribute to the great educational effect of this work which is bound to react in China. It is inevitable that the impressions of those who have served in France will be carried back to China and affect its people. France has been a great school for the Chinese as well as for other nations. The medical missionaries and Y. M. C. A. workers are a valuable part of the faculty and the modern methods used in the big hospital form an important part of the curriculum. Such of the one hundred and forty thousand men as return to China will act as interpreters of the western civilization to their compatriots.

ARTIFICIAL LEGS NO HANDICAP ON BALLROOM FLOOR

Walter Reed's Dancing Instructor Teaches One-Legged Men the Art—Many Others Learn in New Red Cross Class

"And say, Buddy, you with one leg off, don't hesitate in coming up to these classes," says *The Come-Back*, issued at the Walter Reed General Hospital, Takoma Park, D. C., in announcing the new dancing class opened in the gymnasium under the direction of the Red Cross. There is a "step class," or elementary class, where the beginning steps and the proper postures in dancing are taught, an assembly class for general dancing, and, besides, a special class for men with artificial legs. With a little training, they can learn to move about a ballroom with as much ease and grace as anybody else.

OCCUPATIONAL THERAPY, VOCATIONAL RE-EDUCATION AND INDUSTRIAL REHABILITATION

Conducted by DOUGLAS C. McMURTRIE, *Director Red Cross Institute for Crippled and Disabled Men* and ELIZABETH G. UPHAM, *Advisor in Occupational Therapy, Milwaukee-Downer College.*

EDUCATIONAL SERVICE UNITED STATES GENERAL HOSPITAL, RAHWAY, N. J.

Vocational Training to Aid, Cure, and Restore Functions—Interesting Occupations Prevent Men from Brooding —Special Education in Line With Past Employment

By FRANKLIN W. JOHNSON, Major Sanitary Corps, U. S. Army, Chief of the Educational Service.

There is a popular misconception that the educational work undertaken in our army hospitals is for the purpose of giving men vocational training to fit them for occupations when they are discharged from the army. This the government is undertaking to do for disabled men after their discharge through the Federal Board of Vocational Education. Only to a very limited degree does the hospital school aim to give vocational training. Its aim, primarily, is to assist in the cure and functional restoration of disabled men.

A brief statement of the equipment and personnel of the educational service is necessary to an understanding of the scope and method of the work. At General Hospital No. 3 the equipment consists of two shop buildings, 23 by 156 feet in dimensions, and a two-story school building somewhat larger, containing offices, library and thirteen classrooms. A large two-story ward has just been added to meet the increasing demands for space. In addition there are a greenhouse and an oxyactylene welding shop built by the patients.

The staff for instruction and administration includes six commissioned officers, forty-four enlisted men, six employed civilians and forty-six woman aids. The majority of the staff are college graduates, some holding professional degrees. Most of these have been teachers in civil life, and others are chiefly skilled mechanics. From this group of men and women the necessary faculty for a cosmopolitan high school, or a good college, could be secured.

Fig. 1. Measuring flexion and extension of injured finger.

Fig. 2. Teaching left-hand writing.

The scope of the work can be seen in the following list of courses offered:

A. *Ward Work.*—Handicrafts, mathematics, drawing, (a) architectural, (b) mechanical, (c) freehand, bookkeeping, English, penmanship, stenography, typewriting, telegraphy.

B. *Technical.*—Applied arts, bench woodworking, electrical shop, freehand drawing, architectural and mechanical drafting, shoe machine operation, sign painting, automobile mechanics, gas engine mechanics, printing and linotyping, telegraphy, acetylene welding.

C. *Classroom.*—Algebra, arithemtic, bookkeeping, chemistry, elementary science, advanced English, geometry, left-hand writing, penmanship, reading and writing for foreigners, salesmanship and advertising, shop mathematics, spelling, typewriting and stenography.

D. *General Agriculture.*—(a) indoor, (b) outdoor, landscape gardening, greenhouse.

Work on Post.—Garage, receiving ward, postoffice, laundry, cooking, tailoring, plumbing.

The work begins with acute cases in the ward. In each of the thirty wards there is an occupational aid, a trained craft worker, who instructs the men either in their beds or in the solaria at the ends of the wards in various types of handicraft with simple tools and inexpensive materials easily procured. Among the types of work are toy-making, clay-modeling, weaving, rug-making, basketry, leather-tooling, poster-making, the making and decoration of boxes and book ends, woodcarving, picture-framing and various forms of design in wood, leather, metal and fabrics. This work is distinctively curative, even if it only furnishes interesting occupation which prevents brooding over one's disabilities. In many cases it is helpful in the restoration of disabled members. It is felt that the curative results will be greater if the products have artistic quality and intrinsic value. Consequently tasks not appealing to a sane and well person as men's jobs are not encouraged.

Fig. 4. Functional restoration of an injured wrist through typewriting.

Fig. 3. Craft-work in a ward solarium.

Fig. 5. Restoring functions of an injured shoulder.

Fig. 6. Bedside work in mechanical drawing.

raw materials used and the amount of skill and labor involved in their production. The remainder of the proceeds is used for the purchase of supplies for the work.

In addition to the occupational work there is also provided instruction in English, mathematics, foreign language, penmanship, accounting, drawing, typewriting, telegraphy and similar subjects for men who prefer this class of work, while many take up both occupational and academic study. This work also has primarily a curative aim. It is not an unusual thing on entering an acute ward to find practically all the men busy with these various forms of work. During the past month there were 807 patients engaged in occupational work and 323 in academic work in the wards.

There has come to be full cooperation on the part of the ward surgeons in regard to both the occupational work in the wards and the work at the school, for they quickly observe the better spirit of their wards when the men are busy with their tasks. Various projects have developed in which the different wards have competed with each other with great interest. There have been contests in making posters, toys, etc., and prizes have been awarded for the best results.

One ward made a circus in which all the birds and animals ever seen in captivity were produced, some in cages and other at large, all under a capacious tent. A circus parade through several wards strained hospital discipline, but resulted in increased interest and improved morale. The offices of the ward surgeons contain racks and various helpful devices made by patients and the wards are made attractive by artistic and clever decorations produced.

When the patients are able to leave the wards they are urged to go to school. The aids acquaint the men with the types of instruction offered here and advise the survey officers regarding the tastes and needs of the men. The patient comes to the school with a prescription from the ward surgeon giving a diagnosis of his case, the probable length of stay in the hospital, the curative result to be secured, and suggestion as to any activity likely to be injurious. This prescription is of particular importance in orthopedic cases in which some specific functional result is desired.

The various products are used by the men as gifts or find a ready sale. Several hundreds of dollars are realized each month from sales of which the men receive a considerable percentage varying with the relative cost of the

On coming to the school the patient is interviewed and a survey made of his previous educational and occupational history. Of the men thus surveyed it is found that the average school training is seven grades. As the statement of the men is taken and many of them are in doubt as to the amount of their schooling, it is probable that the actual facts, if ascertainable, would show their average school training to be considerably less than seven grades. We have found many more men with one grade, or less, than those who have had any college work.

The men are assigned to school work on the basis of their curative and vocational needs. Patients with ankylosed joints or injuries to muscles or nerves are assigned to such work as typewriting, telegraphy, typesetting, and the uses of various hand tools and foot or handpower machines. An officer is assigned to the task of following up these men, explaining to the instructor the specific needs of the patient and seeing that the patient himself keeps at his task

Fig. 7. Bedside instruction in mathematics.

Fig. 8. Restoring function of hand.

in a proper manner. Three times each week the patient goes to the metrotherapy room where various instruments are employed to measure the extent to which each injured part is functioning. Instruments have been devised for measuring the amplitude of motion of the joint of the finger, wrist, elbow, shoulder, knee, and ankle. Other instruments record the strength of the injured members. Each man's progress is charted and the interest which he takes in this graphic representation of his improvement furnishes no small incentive to the faithful performance of his task.

A well-equipped gymnasium with trained instructors provides opportunity for curative exercise and games. This is particularly valuable for certain types of orthopedic cases and for men who have suffered amputation. Four of the instructors in the school have suffered amputations, three having lost one hand, another both his hands. These men are particularly valuable in dealing with men with similar disabilities.

Plans are formed for the preparation and equipment of a large athletic field which will add greatly to the attractiveness and value of the physical exercises, when the weather is suitable for various outdoor games. There are also plans for landscape gardening and the planting and

care of ward gardens in the open spaces about the grounds. Contests between the wards, for which prizes will be offered, will add greatly to the interest in this healthful work for men during their period of convalescence.

From the point of view of vocational training, fortunately most of the men will be able to return to their former occupation. For these the assignment is made to work which will supplement their previously acquired knowledge or skill. A farmer—and farming claims more men than any other two occupations—might be assigned to farm accounting, gas engine repair, carpentry, or to the academic side of farming, or to the greenhouse. Clerks form the next largest group, and these might be assigned to typewriting, stenography, accounting or salesmanship. There are many men whose loss of a hand suggests left-hand writing as important training. A very large number of men are given instruction in elementary English, writing, and arithmetic, especially of the large foreign-speaking class, many of whom are illiterate in their own language.

The task of the survey officer is particularly difficult when it comes to the assignment of men whose handicap will not permit them to resume their former occupation. Here it is important to propose one in which his former experience will function as far as possible. A railroad man might be assigned to telegraphy, a skilled mechanic to design, a salesman to typewriting and stenography. But, unfortunately, all cases are not so easy, for instance, an illiterate Italian laborer whose right arm is off at the shoulder. Sometimes we are able to suggest to the surgical staff remedial measures. A man who had been a train dispatcher for a large railroad sat beside me for assignment recently. His right elbow was permanently ankylosed, with the hand in such position that it was useless for his occupation. A consultation with the chief of the surgical division resulted in examination of the case from which it was decided that an operation would place his hand in such position that he could resume his former work without retraining. And the man was glad to submit to the operation.

The limits of a brief article allow only a sketch of the varied activities of a hospital school. During the past month 83 per cent of the 1,460 patients in the hospital have been engaged in some kind of educational work. It is an interesting attempt to apply the agencies of the school to the cure of disabled men, giving them, while their bodies are being restored to the fullest possible degree, a right social attitude which will send them back to civil life not dependents, but self-respecting and useful members of society.

THE HANDICRAFT DEPARTMENT, THE HOSPITAL SCHOOL AND THE CONVALESCENT HOME OF THE CINCINNATI GENERAL HOSPITAL

Occupations for Patients Acutely Ill Necessarily Therapeutic Rather than Vocational—Hospital School Part of Public School System

By IMOGENE POOLE, Director Social Service Department, Cincinnati General Hospital, Cincinnati

The work with the convalescents of the Cincinnati General Hospital falls into the following classes: that done (1) in the handicraft shop and at the bedsides with the adult convalescents; (2) in the hospital school with the convalescent children; (3) at the convalescent home in the country with all convalescent patients, men, women, and children.

The handicraft department, employing three workers and financed by the Hospital Social Service Association, is located on a bright enclosed roof of one of the hospital pavilions. In the summertime, when the weather permits, the patients are taken out on the open roof adjoining the handicraft shop for their work. There, upon the advice of the attending physicians, adult convalescents are given pleasant and cheerful work to do.

The weaving of many-colored articles, the creation of beautiful pieces of pottery, basketry and beadwork, and the making of attractive toys and manikins tend to divert the minds of the patients from their illness and thus aid in their more speedy recovery. Work, especially sewing, is also carried into the wards to every patient who is equal to taking it. More and more useful occupations adapted to the patients' physical condition are taught, such as the caning of chairs and telegraphy, as the value of occupational training for the physically handicapped is appreciated in returning the patient to the industrial world to be again self-supporting rather than a dependent upon society.

In a hospital such as the Cincinnati General Hospital, however, which is primarily for the treatment of acute illnesses and where patients do not remain long enough to learn a trade, industries cannot be taught, as the object of the hospital is to release patients as soon as they are ready for continued clinical or convalescent care or further treatment in other hospitals, such as tuberculosis or insane hospitals or homes for the blind, etc.

Therefore, the work of our handicraft department is primarily of therapeutic value since it serves as temporary activity to fill the idle hours of the patients and to help them to forget their aches and pains. Again, the ability of the hospital to provide specialized and remunerative work is, no doubt, open to question.

As we appreciate the value of vocational training for the crippled soldiers, so must we encourage the vocational training of those injured by disease or industry. Our handicraft department might easily be the stepping-stone to a larger field of industrial education and occupation at a convalescent hospital or convalescent home if it were prepared to give industrial training to the handicapped along such lines as typewriting, shorthand, mechanical drawing, woodwork, motor engineering, and a number of other subjects. In addition, cooperative courses could be established so that those in training might, as they developed, serve as apprentices in the large local industries.

During the past year, classes have been conducted in occupational therapy for applicants for home and overseas service in the military convalescent hospitals as occupational therapeutists. The graduates of the classes have received positions, some in this country and others abroad. The courses given included lectures by members of the staff on the medical and psychological phases of rehabilitation, lectures on the theory of occupational therapy, and teaching by the students in the hospital wards under the supervision of the handicraft department.

The hospital school is an interesting phase of occupational activity. For several years, the teaching of the convalescent children was done in the wards by volunteers under the supervision of the educational committee of the Hospital Social Service Association. After several years of experimenting the project appeared to be worth while, with the result that the board of education fitted up a hospital school and made it a part of the public school system. The school is delightfully located on the enclosed roof on one of the hospital pavilions.

The consent of the attending physician for the children's presence at school is the first requisite, after which a maid conveys the children to and from their classes. Two

teachers who are regularly employed by the board of education with a few volunteers give individual instruction to thirty children daily, besides reaching an average of twenty-five children daily at their bedsides. The courses of study are similar to those used in the public schools and include a great deal of handwork besides the general educational work that is followed in the grades. In this way the children are enabled to keep up with their lessons while necessarily absent from their reguar schools and to have joy and sunshine instilled into their lives while they are patients at the hospital.

Last spring, a survey of cases of physically handicapped but mentally competent children was made by the hospital school, the social service department, the children's clinic and the attendance department of the board of education, to see whether proper educational advantages could be provided for them. The survey established the fact that over two hundred cases existed that needed special consideration. Through the agencies mentioned above and through the aid of the administration of the Cincinnati General Hospital, the board of education, and the child welfare committee of the National Council of Defense, it was made possible to establish a class of about twenty-five children, in charge of the teachers of the hospital school.

This recent addition to the hospital school makes it possible for the crippled children to be not only under the careful training of the teacher but also to be under the medical supervision of the physician, should any of the children need medical or orthopedic treatment.

Through the efforts of the Hospital Social Service Association, Cincinnati, with its hospitals, dispensaries and many allied social agencies is fortunate in having a convalescent home in the country to which may be sent those in need of one or two weeks, or more if necessary, of convalescent care following illness. Many times, a patient no longer needs hospital care but is by no means ready to take up again the burdens of life. And to force him to assume them, before he is strong enough, often means that a great deal of the benefit of the hospital care may be lost. The waste in human life is apparent as well as that in time and money.

Likewise, the convalescent home is a measure for the prevention of illness. Many persons can be saved from complete physical exhaustion or mental depression and possible hospital care if only discovered in time and given the benefit of a rest and change from their strenuous and routine life. The continued increase in number of such applicants emphasizes the need and value of such preventive work.

Thus, the adult convalescents are reached through the handicraft department and the convalescent home and the convalescent and crippled children through the hospital school.

THE CIVILIAN BLIND PROFIT BY SOLDIERS' EXPERIENCE

The Great Numbers of Civilian Blind Need No Longer Be "Disabled"—St. Dunstan's Influence Its Most Important Work

It has been a general condition for many years that industry has had no place for the blind who sought to enter it, and has continually rejected those who were blinded by its processes. It is true that numerically the men blinded in industry are a far greater national problem than the blinded soldiers, but it was the war that to a great extent awakened us to the realization that the blinded man need not be an industrial outcast, for the fifteen thousand in this country who are blind as a result of industrial injury were not blinded all at once in a common service. England's war-blind seemed a much more appalling question. Among our own forces abroad, only one hundred and ten men were blinded, fifty-five of them totally.

The English system of reeducating the blind has grown very largely from the experiments of Sir Arthur Pearson, himself a blinded man, who founded St. Dunstan's Hostel in London. In a large degree the other countries have come to take St. Dunstan's as a model for all that a school for the blind should be—in spirit of service, scientific understanding, adequacy of equipment, and technique of training.

St. Dunstan's greatest service has not been in taking care of the convalescent blinded soldiers of England. The remarkable fact about it is not the wonderful atmosphere of regeneration it inspires; the inestimable service it has rendered lies in the psychological effect on the world of the knowledge that a St. Dunstan's man is a competent worker in some line when he goes out. Ninety per cent of the patients at the hostel are trained and placed in industry.

This brings us to some appreciation of the unfair negligence with which we have regarded a blind man as "disabled." Sir Arthur Pearson said, "Blindness is only a temporary disability." When he received a new patient into the life at St. Dunstan's, he would put his hand on the other's shoulder and say, "Never mind; you and I have seen everything that's worth seeing anyway." He asserted that after a man had been "taught to be blind," there were more than a few occupations that he could follow with as much success as a sighted workman. He called the public attention to the fact that typewriting was originally invented to enable the blind to write. Blind typists have more speed and accuracy than most stenographers. "Ah, Madame," exclaimed a blind poilu to a visitor, "it is your eyes that keep you from seeing." There are openings for the blind in electrical work, agriculture, poultry farming, cobbling, mat-making, brush-making, netting, massage, woodworking, saddlery, and commercial work.

As far as possible, the blind should be kept on a normal footing. It is extremely important to keep up a blind man's belief in himself, his sense of being a part of the active world. Those who have been blinded after years of sight must not be abandoned as unfortunate outcasts. Professor Romagnoli, an Italian authority, reminds us that such a victim is "a normal man forced to live in darkness." To lighten this darkness with a wealth of mental images, and thus to preserve the normal attitude of the victim, we must first of all awaken his interest in learning something during convalescence, and make him realize that he is not barred from industry. Isolation of the blind in separate institutions or workshops is narrowing and numbing to their spirit of imagination and aspiration. They need contact with normal people to refresh their mental pictures, "to see with the eyes of others."

When these war developments are generally adopted and perfected, we shall have a new system of industrial rehabilitation of the blind. On a large scale, the St. Dunstan's methods should provide for the permanent employment of those victims of industry whose destroyed eyesight has placed them in the ranks of the inefficient and dependent.

DEPARTMENT OF DIETETICS

Conducted by LULU GRAVES.

Please address items of news and inquiries regarding Department of Dietetics to the editor of this department, Home Economics Building, Cornell University, Ithaca, N. Y.

SOME OF THE NEWER PROPRIETARY FOODS

Diabetic Foods, Cereal Breakfast Foods, Infant Foods, and Miscellaneous Proprietary Preparations

By JOHN PHILLIPS STREET, Chemist, Agricultural Station, New Haven, Conn.

In taking up again the series of papers interrupted by my absence in service with the army in England and France, it seems well to bring up to date certain classes of foods treated in earlier papers. Accordingly herewith are presented analyses of some of the newer proprietary foods examined in my laboratory since the papers referred to above were published. These analyses include 31 diabetic foods, 43 cereal breakfast foods, 4 Brosia meals, 6 coffee substitutes, 4 fig preparations, 2 infant foods, 7 milk preparations, 4 egg substitutes, 3 jelly and junket powders, 4 vegetable extracts, 5 chocolates and cocoas, and 11 miscellaneous foods.

DIABETIC FOODS

Most of these products require no special comment. The wide range in composition of products sold specifically to meet the requirements of diabetics is apparent. Some of these are excellent preparations, while others are no more suited to the diabetic than ordinary breads or flour. The important point in connection with these products is that their exact composition should be known to the physician advocating their use. Long experience with these preparations has demonstrated how little dependence can be placed on the claims of many of the manufacturers, and for that reason these analyses of so-called diabetic foods, made strictly without prejudice, should be of value to physicians, dietitians, and any others interested in food and diet.

Some of the brands listed in the table have been analyzed before in this laboratory and the results indicate a failing that the manufacturer should correct if he wishes the intelligent consumer to have confidence in his wares, viz.: the lack of uniformity in composition of brands sold under the same name at different times. The analyses of Loeb's Gluten Almond Zwieback and Loeb's Gluten Zwieback are cases in point. The same criticism applies to certain of the Kellogg products, in spite of the emphasized claim as to their "standardization." For instance, in past years we have found their 40% Gluten Flour to range from 35.0 to 42.9 per cent protein. In justice to the seller of Roman Meal it should be stated that we have no knowledge that this is offered as a diabetic food. This particular sample was sent to us by a diabetic with inquiries as to whether its use was permissible; obviously it is in appropriate for a strict diabetic dietary.

Since the composition of his food is of at least as much importance to the diabetic as the potency of his medicine is to a sufferer from heart disease, knowledge of the composition of these foods is obviously necessary.

CEREAL BREAKFAST FOODS

These samples likewise require little comment. They represent the newer brands of these foods, and include as well some long-established brands not previously analyzed by us. The analyses emphasize a fact which we have referred to in the past, namely, the deficiency in fat shown by all of these products except the oat preparations. But here again warning must be given of the danger in comparing the composition of "ready-to-eat" products with those of foods like oatmeals, which require the admixture of large quantities of water before they can be consumed. Because of the wide fluctuations in prices in these unsettled times, all prices are omitted from the table, but the careful consumer may well give quite as much attention, in these days of the high cost of living, to the cost of his breakfast foods as to their composition.

TABLE 1. "DIABETIC" PREPARATIONS

Brand and Manufacturer.	Water.	Ash.	Protein (N × 6.25)	Fat.	Fiber.	Nitrogen-free extract.	Starch.
Ayos Soy Bean Flour, Waukesha Health Products Co.	8.75	4.13	41.44	16.87	3.82	24.99	0.56
Allison's Cotton Seed Flour, Schulenburg Oil Mill, Schulenburg, Texas	9.38	5.95	50.38	11.24	2.70	20.35	1.07
Christian's Protoid Nuts, Christian's Nat. Food Co., Kenilworth, N J.	4.23	4.27	37.63	48.22	5.65		Tr.
Genteel Flour, Wilson Bros., Rochester, N. Y.	11.41	0.92	17.13	1.96	0.25	68.33	60.52
Akoll Biscuits, Huntley & Palmer, Reading, Eng.	7.97	3.43	53.56	28.33	.0.49	6.22	Tr.
Loeb's Diab. Almond Macaroons, Loeb's Diab. Food Bak., N. Y.	4.55	4.01	34.25	45.01	1.72	10.46	Tr.
Loeb's Diab. Bread Sticks, Loeb's Diab. Food Bak., N. Y.	8.15	2.87	46.31	0.29	0.19	42.19	35.02
Loeb's Diab. Butter Cookies, Loeb's Diab. Food Bak., N. Y.	6.14	2.22	39.31	14.93	0.15	37.25	32.18
Loeb's Diab. Butter Cookies, Loeb's Diab. Food Bak., N. Y.	4.07	2.86	31.38	22.29	0.35	39.05	30.66
Loeb's Diab. Lady Fingers, Loeb's Diab. Food Bak., N. Y.	5.97	3.46	48.00	32.29	0.07	9.71	2.14
Loeb's Diab. Sponge Cookies, Loeb's Diab. Food Bak., N. Y.	5.82	3.49	44 63	37.17	0.23	8.66	1.91
Loeb's Genuine Gluten Bread, Loeb's Diab. Food Bak., N. Y.	27.72	1.51	35.40	0.17	0.21	34.99	26.37
Loeb's Gluten Almond Zwiebach, Loeb's Diab. Food Bak., N. Y.	7.84	2.38	42.56	20.59	0.60	26.03	19.13
Loeb's Gluten Almond Zwiebach, Loeb's Diab. Food Bak., N. Y.	8.04	1.97	44.00	6.10	0.33	39.56	33.10
Loeb's Gluten Cracker Meal, Loeb's Diab. Food Bak., N. Y.	8.22	1.07	42.63	8.92	0.19	38.97	31.59
Loeb's Gluten Luft Bread, Loeb's Diab. Food Bak., N. Y.	7.05	1.20	44.50	9.78	0.18	37.29	29.93
Loeb's Gluten Noodles, Loeb's Diab. Food Bak., N. Y.	9.25	0.69	45.19	1.03	0.15	43.69	33.19
Loeb's Gluten Zwiebach, Loeb's Diab. Food Bak., N. Y.	8.39	1.45	46.69	13.45	0.18	29.84	23.43
Loeb's Gluten Zwiebach, Loeb's Diab. Food Bak., N. Y.	8.27	2.34	45.44	2.39	0.20	41.06	35.72
Loeb's Pure Gluten Flour, Loeb's Diab. Food Bak., N. Y.	8.85	0.51	47.81	1.01	0.13	41.69	35.78
Kellogg's 20% Gluten Meal, Kellogg Food Co., Battle Creek, Mich.	7.65	1.22	27.06	0.92	0.12	63.03	51.24
Kellogg's 40% Gluten Flour, Kellogg Food Co., Battle Creek, Mich.	8.62	0.89	36.88	1.43	0.08	52.10	48.04
Kellogg's 40% Gluten Meal, Kellogg Food Co., Battle Creek, Mich.	7.30	1.36	45.56	1.11	0.10	44.57	36.59
Kellogg's Pure Gluten Meal, Kellogg Food Co., Battle Creek, Mich.	4.60	0.96	84.19	0.81	0.08	9.36	6.77
Kellogg's Pure Gluten Biscuit, Kellogg Food Co., Battle Creek, Mich.	8.30	2.04	81.00	0.83	0.12	7.71	4.02
Kellogg's 40% Gluten Biscuit, Kellogg Food Co., Battle Creek, Mich.	8.50	1.48	45.13	0.98	0.08	43.83	36.98
Lister's Casein Bread, Lister Bros., N. Y.	38.27	4.24	36.57	18.38	0.05	2.49	None
Lister's Casein Flour, Lister Bros., N. Y.	5.70	5.78	84.50	3.60	0.05	0.37	None
Lister's Diabetic Flour, Lister Bros., N. Y.	11.62	2.77	67.38	0.86	0.17	17.20	None
Louguets de Lausanne, Manuel Frères	10 78	3.04	14.19	5 53	0.44	66 02	49.16
Roman Meal, S. S. Pierce Co., Boston	8.54	3.68	13.31	3.43	4.98	66.06	37.35

CHOCOLATE AND COCOA

Five brands, not hitherto examined by us, are reported. These are Alkethrepta, Ghirardelli's Sweet Ground Chocolate and Cocoa, Hub Milk Chocolate Sweetened, Cocoatina Anti-Dyspeptic Cocoa, and Michaelis' Acorn-Cocoa.

EGG SUBSTITUTES

For the purpose of comparison the analyses of three genuine dried egg products are included in the table. High percentages of protein and fat are obviously essential ingredients. The high price of eggs during recent years has encouraged the development of various egg substitutes, the composition of four of which is shown in the table. Such products as a rule consist essentially of protein (derived usually from casein or dried skimmed milk), starch, and baking powder ingredients to supply leavening power. The chief suggestion of egg lies in the artificial yellow color.

Egg-O-Gene claims to be made from "corn and milk products with certified pure food color." Yelco claims to contain "powdered milk, rice flour, bicarbonate of soda, cream of tartar, tartaric acid, powdered turmeric and corn starch." Centenegg claims to contain "vegetable, cereal and milk products and no egg." Egg-Nu claims to contain "the nutrient of eggs artificially colored."

All of these products are in conflict with the regulations of sale in force in many of the states. Egg-Nu may contain a small amount of egg material, but the others are practically egg-free.

JELLY AND JUNKET POWDERS

Falconjel claims to be "composed of gelatin, sugar, citric acid, artificial flavor, and vegetable color." Jiffy-Jell is "a mixture, vegetable color." Nesnah" containsU. S. certified color."

These three samples substantially satisfy their claims,

TABLE 2. CEREAL BREAKFAST FOODS

Brand.	Water.	Ash.	Protein (N × 6.25).	Fat.	Fiber.	Nitrogen-free Extract.	Starch.
Alber's Wheat Flakes Mush	11.5	1.6	11.1	2.1	0.3	73.4	59.2
Bestovotes	11.0	2.1	16.2	6.6	1.0	63.1	55.1
Bran-eata Biscuits, Toasted	9.8	4.4	9.1	0.9	3.6	22.2	21.0
Bufceco Rolled Oats	11.1	2.0	15.1	6.8	1.0	64.0	55.6
Capitol Health Bran	11.2	5 3	13.4	4.3	8.2	57.6	....
Cero-Vita	4.6	3.5	8.9	0.7	0.3	82.0	52.3
Cinnamon Rusks (Peterson)	9.9	0.7	10.3	7.2	0 2	71.7	49.5
Comet Cereal Rice Breakfast Food	11.3	0.3	7.2	0.3	0 2	80.7	....
Cream of Barley (Am. Barley Co.)	9.2	1.4	11.1	1.6	0.6	76.1	62.4
Cream of Rye (Minn. Cereal Co.)	11.5	1.7	12.0	1.6	1.4	71.8	46.0
Goodman's Berliner Tea Matzoths	9.1	0.6	14.2	0.3	0.3	75.5	64.1
Grant's Hygienic Crackers	9.2	3.2	12.3	2.0	1.5	71.8	53.0
Hecker's Cream Hominy	11.7	0.3	9.8	0.4	0.5	77.3	71.2
Hecker's Cream Oat Meal	11.5	1.8	15.6	5.6	0.9	64.6	56.7
Home Made Sun Rise Rice Cakes	2.5	0 4	6.9	0 3	0 2	89.7	36.8
Jersey Corn Flakes	7.7	0.9	8.5	0.3	0.3	82.3	64.7
Keen & Robinson's Gran. Scotch Oat Meal	10.4	1.9	13.7	9.1	0.8	64.1	57 0
Kellogg's Krumbles	10.0	2.6	12.0	1.2	1.9	72.3	59.0
Malabar Manoca	13.3	1 3	0 6	0.1	0 6	84 1	....
McCann's Irish Oat Meal	9.2	1.8	15.1	8.7	0.3	64.9	56.8
Mother's Wheat Hearts	13.5	0.4	10.7	1.1	0.2	74.1	65.0
Pillsbury's Vitos	11.6	0.5	11.1	1.0	0 2	75.6	68.7
Post Tavern Porridge	12.7	1.5	10 3	0.8	0.2	74.5	67.2
Purity Brand Rolled Oats	13.5	2.0	16.3	6.1	1.0	61.1	57.4
Quaker Corn Puffs	12.0	0.4	8.7	0.3	0.1	78.5	43.2
Quaker Fancy Hominy Grits	13.2	0 5	7.9	0.5	0 2	77.7	71.0
Quaker (F. S.) Farina	13.7	0.4	10.2	0.9	0.2	74.6	63.9
Quaker Puffed Wheat	11.5	1.8	13.1	1.8	1.6	70.2	29.5
Ralston Wheat Food	11.9	1.1	11.3	1.8	0.8	73.1	62.8
Robinson Patent Groats	8.4	1.8	12.8	8.6	0.7	67.7	60.5
Sanitas Granuto	4.9	1.3	10.1	1.7	0.4	81.6	43.4
Scott's Porage Oats	10.1	1.7	13.3	9.6	0.4	64.9	56.8
Sunbeam Pure Food Pearl Hominy	14.3	0.4	9.4	0 6	0.3	75 0	70.8
Toasted Rice Biscuit (Kellogg)	5.0	3.7	10.1	0.3	0.2	80.7	57.4
Toasted Rice Flakes (Kellogg)	4.7	3.4	10.0	0.4	0.2	81.3	55.7
Toasted Rye Flakes (Kellogg)	8.1	2.2	11.4	1.5	0 6	76.2	45.7
Toasted Wheat Biscuit (Kellogg)	5.8	2.4	14.2	1.4	1.5	74.7	45.8
Toasted Wheat Flakes (Kellogg)	5.2	2.7	9.3	1.1	1.2	80.5	57.0
Von's Health Biscuit	9.3	4.0	9.8	6.1	4.4	66.4	22.8
Washington Corn Crisps	12.1	2.9	7.8	0.2	0.2	76.8	59.5
Whole Grain Wheat Whole Grain Wheat Co.)	66.2	1.5	6.6	0.8	1.2	23.7	....
Whole Wheat Wafers (Battle Creek Sanitarium)	6.0	1.9	10.4	7.6	0.6	73.5	....
Zwiebach (Battle Creek Sanitar'm)	6.2	1.6	14.3	1.6	0.2	76.1	60.4

TABLE 3. CHOCOLATE AND COCOA

	Alke-threpta	Hub Milk Chocolate	Ghira-delli's	Cocoa-tina	Michaelis' Acorn-Cocoa
Water	3.64	3.18	2.64	6.26	6.38
Ash	1.26	3.27	2.67	6 83	5 41
Fat	17.10	12 88	17 22	27.18	13 94
Protein (N × 6.25)*	5.44	11.44	8.81	21.56	16.94
Crude fiber	0 65	0 64	1.45	3.66	2.48
Starch	21.03†	2.93	4.13	13.44	18.95‡
Cane sugar and other carbohydrates	50.88	68.59	67.21	21.07	35.90
Milk sugar	....	Present	.....	.....	....
Calories per 100 gm	463	448	496	469	413

*These values are from 0.65 to 100 per cent too high, owing to inclusion of theobromin and caffein nitrogen (not determined) in the calculation; the value for "other carbohydrates" is correspondingly low.
†Contains cornstarch.
‡Contains added starch.

TABLE 4. EGG SUBSTITUTES

	Genuine Dried Eggs (a)	(b)	(c)	Egg-O-Gene	Yelco	Centen-egg	Egg-Nu
Water	4.44	3.68	6.13	11.44	8.26	11.79	6.20
Ash	4.06	4.17	3.83	2.80	19.67	2.07	9.85
Protein (N × 6.25	38.13	42.50	39.13	27.38	4.38	22.19	27.69
Fiber	....	....	....	....	....	0.08	Tr.
Nitrogen-free Extract.	8.69	7.39	6.22	57.51	65.55	63.77	50.61
Fat	44.68	41.72	44.69	0.87	2.14	0.10	5.65
Starch	....	....	....	49.33	41.62	56.36	23.64
Lecithin phosphoric acid	....	....	....	0.01	0.005	....	0.17
Color	....	....	....	Cl. tar	Tumeric	Nat.	Cl. tar

TABLE 5. JELLY AND JUNKET POWDERS

Brand	Water	Ash	Gelatin (N×5.55)	Cane Sugar	Undetermined	Color
Falconjel, Raspberry	2.43	0.15	7.66	88.33	1.41	Lichen
Jiffy-Jell, Orange	3.28	0.21	8.05	88.11	0.35	Cochineal
Nesnah, Lemon	0.15	0.35	0.00	98.82	0.68	Coal tar

TABLE 6. MILK PREPARATIONS

	Water	Ash	Protein (N×6.38)	Milk Sugar	Fat
Borden's White Cross Skimilkris	2.90	8.30	35.73	51.41	1.93
Randal's Soluble Dry Milk	3.37	8.10	34.45	52.62	1.46
Stubben's Steril. Whipped Cream	62.22	0.56	2.57	2.60	32.05
Hebe	74.51	1.58	6.38	9.36	8.18
Mammala	4.05	5.75	25.78	49.90	14.52
Krystalak	5.05	8.37	35.41	47.97	3.20
Lactora	8.39	7.74	32.47	48.80	2.60

TABLE 7. VEGETABLE EXTRACTS

	Millennium	Savora	Vegex	Vegex Cubes
Water	26.13	25.90	28.24	7.22
Total nitrogen	5.67	3.37	5.28	3.02
Ash	26.39	42.87	25.73	64.59
Chlorine	8.70	20.97	7.86	34.59
Sodium chloride	14.36	34.60	12.96	57.02
Creatinin	None	None	None	None
Nitrates	None	None	None	None

TABLE 8. MISCELLANEOUS FOODS

Brand	Water.	Ash.	Protein (N × 6.25).	Fat.	Fiber.	Nitrogen-free Extracts.	Starch.
Brosia Meals							
Lentil Brosia Meal	7.9	2.8	29.8	1.3	2.4	55.8	41.2
Pease Brosia Meal, Scotch	8.2	2.9	27.0	1.8	1.7	58.4	41.9
Pease Brosia Meal	7.2	3.0	29.1	2.6	7.6	50.5	20.1
White Bean Brosia Meal	8.9	3.6	24.6	1.8	1.5	59.6	35.7
Coffee Substitutes							
Drinket (Kellogg)	8.0	4.4	5.7	0.0	0.0	81.9	....
Old Grist Mill (Potter & Wrightington)	9.6	3.2	15.1	3.9	9.2	59.0	30.4
Jaffee (Beech-Nut)	9.9	3.9	11.0	1.7	9.8	63.7	16.4
Postum Cereal	9.1	6.9	12.4	3.3	8.6	59.7	19.2
Calumet Cereal	9.1	3.7	13.1	4.4	6.6	63.1	38.0
Barley Coffee (Calumet T. & C. Co.)	6.2	3.0	10.8	2.7	5.2	72.1	42.8
Fig Preparations							
Fig Marmalade (Cudahy)	27.6	1.0	1.2	0.5	2.3	67.4	†
Black Fig Marmalade (Kellogg)	48.9	1.0	1.3	0.5	1.5	46.8	‡
White Fig Marmalade (Kellogg)	37.9	1.1	1.8	0.7	1.8	56.7	‡
Fig Bromose (Kellogg)	10.1	1.9	15.8	19.1	1.9	51.2	‡
Infant Foods							
Neave's Food for Infants	8.8	0.6	6.9	1.2	0.2	82.3	70.4
Savory & Moore's Food for Infants and Invalids	6.3	0.8	11.8	1.5	0.1	79.5	69.2
Miscellaneous							
Cocoanut Sticks	6.5	1.9	10.1	8.0	0.4	73.1	....
Dairy Maid Brand Milk Hominy	83.7	0.5	2.5	0 9	0 0	12.4	....
Grissin (Italian Bread Sticks)	10.1	3.6	11.5	7.2	0.2	67.4	....
Good Health Flour	12.0	1.7	15.1	3.3	1.6	66.3	53.8
Nu-Food Health Flour	8.9	1.0	20.6	2.3	0.4	66.8	....

*Old Grist Mill contained 0.17 per cent and Calumet Cereal 0.08 per cent caffein; the other brands contained no caffein.
†Made with cane sugar.
‡Made with maltose.

although of course it is incorrect to class cochineal as a "vegetable" color. Nesnah contains rennin or a rennet-like substance. Granting the convenience of such preparations, to purchase sugar in the form of a jelly powder is not an economical practice.

MILK PREPARATIONS

Borden's Skimilkris is a "dried, skimmed, cow's milk in crystal form." Randal's Soluble Dry Milk is "cow's (separator skim) milk, dry." Sterilized Whipped Cream is, as its name indicates, a whipped cream, imported from Germany. Hebe is a "compound of evaporated skimmed milk and vegetable fat." Mammala is "special dry milk for babies, invalids and convalescents. Pure fresh cow's milk modified by removing a part of the cream and adding a suitable portion of milk sugar." Krystalak is "dry skimmed milk." Lactora is "soluble dry milk."

All of these samples essentially comply with the claims made for them. The first two and last two samples in the table are all dried skimmed milks and are quite similar in composition. In Hebe the milk fat removed has been replaced by adding cocoanut oil. Cocoanut fat is not an adequate substitute for milk fat as a food for children or invalids, and no such claim is made or implied for this preparation, which is intended for "coffee and cereals, baking and cooking." In Mammala about one-half of the fat has been removed and has been replaced by milk sugar.

VEGETABLE EXTRACTS

Millennium Extract claims to be "not made from flesh." Savora claims to be a "vegetable meat extract." Vegex claims to be "made entirely of vegetable products." These claims are essentially correct, although to call Savora a "vegetable meat extract" is improper and contradictory. All of these products are of the yeast extract type and contain no meat extract. Like the latter, they have but little food value and their main usefulness is as stimulants and appetizers. Savora contains 35 and Vegex Cubes 57 per cent of common salt, and they and similar preparations are by no means inexpensive products.

Brosia Meals.—These are made by steam-cooking the respective vegetables, freeing them from the hulls and then grinding them into meals. They are offered as substitutes for meat, and from the protein standpoint compare favorably with that food (see Table 8).

Coffee Substitutes.—These brands are free from coffee, except Old Grist Mill and Calumet Cereal, which contain 0.17 and 0.98 per cent of caffein respectively. These amounts, however, are practically negligible, being only one-seventh and one-fifteenth the quantities found in normal coffee (see Table 8).

Fig Preparations.—These require little comment. No artificial color, saccharin or preservaties were found. The Cudahy brand was made with cane sugar; the other three with "meltose," the Kellogg name for maltose.

Infant Foods.—Neave's Food is essentially a baked flour, while the Savory and Moore Food is composed of wheat flour and malt. Both brands contain very large percentages of starch. Owing to the diastatic ferment present most of the starch in Savory and Moore's Food, if prepared according to directions, would be converted into soluble forms, chiefly dextrins. In Neave's Food such would not be the case, as no ferment is present (see Table 8).

Borden's Condensed Coffee Eagle Brand.—This is "combined with refined sugar and Borden's condensed milk." Properly speaking, this is not a condensed coffee but rather a sweetened condensed milk to which coffee has been added. The caffein content is about one-third that of ordinary coffee.

Water	30.12	Milk Sugar	9.24
Ash	2.25	Fat	6.38
Cane Sugar	45.25	Caffein	0.37
Protein (N × 6.38)	6.76	Calories per 100 gm.	302

Dovitam.—Claimed to be "prepared from four-week-old White King squabs." It contained:

Solids	3.47	Phosphoric acid in ash	0.07
Total nitrogen	0.26	Lecithin phosphoric acid	0.014
Protein (N × 6.25)	1.63	Fat	1.66
Ash	0.21		

The label of this preparation contains a very misleading analysis, in which a jumbling of values in grains and per cents and a detailed percentage composition of the ash, causes confusion even to one accustomed to interpret chemical data. The lecithin claimed amounts to 3 grains per 6 ounces, or, if properly expressed, to 0.114 per cent, a much less imposing figure. The ash amounts to only 0.21 per cent, and whether or not 65.66 per cent of this exists as phosphate of lime as claimed is of no practical importance. With a fat content of 1.66, only about one-half the amount claimed, and a water percentage of 96.53, it is apparent we have to deal with an extremely attenuated food product.

Ovaltine.—"A Tonic Food Beverage," "A concentrated extraction from malt and eggs, flavored with cocoa," "Is rich in lecithin, the assimilable organic compound of phosphorus. It is thus a valuable article of food in cases of mental and nervous exhaustion." We found:

Water	1.03	Lecithin phosphoric acid	0.10
Ash	3.52	Reducing sugars	70.01
Protein (N × 6.25)	12.75	Active amylase	Present
Fat	5.58	Starch	Trace
Fiber	0.64	Calories per 100 gm.	407
Nitrogen-free extract	76.48		

This appears to be composed of the foods claimed. The small amount of lecithin phosphoric acid present, 0.10 per cent, does not justify its claim of being "rich in lecithin" or that it is "a valuable food in cases of mental and nervous exhaustion."

Oystero.—"Oyster broth powder."

Water	3.77	Nitrogen-free extract	23.14
Ash	11.39	Sodium chloride	3.00
Protein (N × 6.25)	52.50	Boric acid	None
Fat	9.20		

The foregoing analysis corresponds to that of dried oyster meat; the preparation appears true to name.

Kremette Ice Cream Dressing.—"A delicious and palatable adjunct to vanilla ice cream."

Alcohol by volume	20.52	Invert sugar	6.40
Solids	43.24	Ash	0.02
Sucrose	35.49	Color	Orchil or Cudbear

Virococo.—"Manufactured on the basis of eggs, malt, milk, peptones, phosphates, cocoa, etc."

Water	1.75	Total phosphoric acid	4.09
Ash	8.51	Lecithin phosphoric acid	0.016
Protein (N × 6.25)	10.25	Water-insoluble nitrogen	1.06
Fiber	0.65	Coagulable nitrogen	0.15
Nitrogen-free extract	69.70	Tannin-salt precipitable nitrogen	0.26
Fat	9.14	Residual nitrogen	0.17
Dextrose	5.93	Total nitrogen	1.64
Sucrose	45.51		
Starch	4.42		

The amount of lecithin phosphoric acid is too small to demonstrate the presence of any considerable amount of whole eggs, but otherwise the ingredients appear to be as claimed.

* * * *

New Appointments

Miss Theodora Root has been appointed superintendent of the New York Orthopedic Hospital. Miss Root was dietitian at this hospital until she was made assistant superintendent a few months ago. We congratulate Miss Root upon her rapid promotion but hope that she will not lose interest in the profession of dietitians.

Miss Katharine Haupt gave up the work at Nopeming Sanatorium, Nopeming, Minn., in June to become dietitian at Hamot Hospital, Erie, Penn.

ALUMINUM COOKING UTENSILS, PRO AND CON

Durability an Offset for the Initial Expense—Aluminum Easy to Clean and to be Kept Clean—Less Danger of Scorching Food

By LULU GRAVES, Professor of Home Economics, Cornell University, Ithaca, N. Y.

The use of aluminum cooking utensils in hospitals, hotels, and other institutions is so general as to scarcely attract the attention of the average person. One who makes a study of kitchen equipment and service, however, is always on the alert for reports or practical suggestions from the experience of others. I have had the privilege the past year of visiting a number of kitchens in hospitals, both large and small; in hotels; in cafeterias and lunch rooms connected with large factories, or other business concerns, as well as those run for commercial purposes. Many of these are well equipped with a good grade of aluminum, or copper, or a combination of these materials; in many others there is a choice collection of aluminum, copper, tin, and junk, but only one kitchen was visited in which no aluminum was used.

There is a division of opinion in regard to the desirability of aluminum cooking utensils. The chief objections are (1) its high price, (2) the fact that it can not be soldered, and (3) that it is hard to care for.

In contrast to the first two objections we hear that while the initial investment is large there is little subsequent expense. The utensils may be used through such a long period of time without need of replacement or repair of any kind; that there is not only a saving in money but there is an additional saving in time and inconvenience which is always associated with sending equipment out for repair or in purchasing of new. At present prices of copper there is little difference in the original cost.

Because light weight aluminum is soft it bends comparatively easily or a hole may be punched into it. With reasonably careful handling this will not occur in the ordinary processes of the kitchen, if heavy-grade aluminum is used. Practically all such occurrences found were due to carelessness of employees in the scullery, while the utensils were there for cleansing, or carelessness in dumbwaiter shafts, or similar circumstances which no material could withstand. Constant strain, due to lifting, may cause the rivets to loosen after a time. All that is necessary to remedy this is to place one end of the rivet against a solid surface and strike the other end with a hammer. This can be done by the plumber, carpenter, or any skilled workman in the institution.

Aluminum requires care to keep it looking well, as does any metal. If the utensils are washed in hot water immediately after being used and while they are still warm they are easily cleaned. If grease or food has been burned on the bottom or inside of a kettle it may be cleaned by putting water into it, covering it and placing it over the fire until the water boils a few minutes; the particles should then be scraped off with a wooden scraper. If this is not sufficient, bath brick or No. 00 steel wool may be used. The manufacturers tell us that any good metal polish which contains no grit or free alkali may be used on aluminum. If the inside of a vessel becomes discolored from water or vegetables which have been cooked in it, it may be cleaned with steel wool, or a little citric acid in the water will remove the discoloration. To prevent discoloration of the outside of containers used in a steam table a few lemon rinds were put in the water bath in one kitchen. This is a most commendable and easy thing to do, as it would be hard to find a large kitchen in which lemons are not used for some purpose every day. If aluminum trays become dark or discolored they may be brightened by using a soap solution and steel wool. If a buffing wheel is available in the kitchen, the trays may be kept bright by using the wheel occasionally to rebuff them.

In kitchens equipped entirely with aluminum, little difficulty is experienced in caring for it. It is where different metals are used with no discrimination in soaps or cleaning powders that this trouble exists.

Aluminum utensils are easily kept clean as there are no seams or joints in which food may lodge. The metal is light in color, so that food particles or grease may be readily seen and thus no matter how careless the dishwasher a dish need never be used which is not clean and sanitary.

Another important feature is its light weight. Large kettles filled with food are very heavy at best; in fairness to the cook these should be as light in weight and convenient to handle as they can be made.

Cooking in these containers should be begun at a temperature high enough to insure that the kettle and food are well heated throughout, then the temperature should be lowered. The metal retains the heat sufficiently to continue the cooking, yet there is no danger of food scorching. By this procedure fuel is saved and no harm comes to either the food or kettle.

In one of the kitchens with which I am most familiar the cook said to me one day, "Just a year ago today we began using our aluminum kettles and not an ounce of food has been wasted the whole year because it was burned; before that we threw away a kettle of something about every day." Think what that meant to the hospital!

If properly cared for, baking pans, griddles and similar utensils with the smooth aluminum surface need little or no greasing; this not only results in a saving of fat but does away with the possibility of objectionable flavor of fat being imparted to the food baked in the pan.

On the whole, where aluminum cooking equipment was being used intelligently by dietitians or chefs we found they were enthusiastic in their praise of it.

* * * *

NEWS NOTES OF DIETITIANS

Miss Josephine Happer, formerly of Presbyterian Base Hospital and Jefferson Barracks, has been made supervising dietitian of the army.

Miss Minnie Phillips has resigned her position in the metabolism ward at the University of Iowa Hospital, and expects to spend the coming year in study at the University of Chicago.

Mrs. John Henry Martin, who for the past few months has been a student dietitian at the New Haven Hospital, has accepted a position as head dietitian at the University of Iowa Hospital.

Miss Elva George has resigned her position as director of Red Cross dietitians in Washington to take charge of the housekeeping department of Barnard College. Miss Margaret Sawyer has been appointed to succeed Miss George.

Mrs. N. W. Wood, dietitian of the Methodist Hospital, Omaha, Neb., is compelled to give up her work on account of ill health. Mrs. Wood was a member of the executive committee of the A. D. A. at the time of the organization of that association, she hopes to be able to attend the meeting in Cincinnati. We trust that a few weeks' rest will be all that is necessary before Mrs. Wood is ready to get back into the hospital field.

Miss Anna Upham, who has been with the British Expeditionary Force in France for nearly two years, has arranged with the United States Rubber Co. to install a real dietetic service, successively in each of their two plants in Naugatuck, Conn.

Miss Lenna Cooper, who was chosen to be the first supervising dietitian of the army, little less than a year ago, has given a service of great value to the dietitians of both army and civil hospitals. At a time when the conditions in base hospitals had been more than chaotic, Miss Cooper succeeded in laying the foundation for a department which will continue to be a feature of army hospitals during peace times. How well this has been done it is unnecessary to say. After a short vacation in which Miss Cooper is taking a trip to the Pacific Coast, she will return to the sanatarium at Battle Creek.

The following outline of the training for student dietitians at New Haven Hospital will give every dietitian a thrill of satisfaction. Miss Geraghty has planned and is executing a training more comprehensive than has been given before for the woman wishing to take up any phase of dietotherapy. No words of praise are necessary, as the course itself tells of what Miss Geraghty has accomplished.

OUTLINE FOR TRAINING OF STUDENT DIETITIANS—NEW HAVEN HOSPITAL

THEORETICAL WORK

Pathological physiology } Department of Experimental Medicine, Yale
Pathology of nutrition { University School of Medicine.
Nutrition of growth—Lafayette B. Mendel, Sheffield Scientic School, Yale University.
Dietetics of infancy and childhood—Department of Pediatrics, Yale University School of Medicine.
Dietetics of pregnancy—Department of Obstetrics, Yale University School of Medicine.
Dietetics of special diseases—Department of Medicine, Yale University School of Medicine.
Acute infectious diseases.
Gastro-enteric.
Cardiovascular-renal.
Metabolic.
Cutaneous.
Physiological seminar—Lafayette B. Mendel, Sheffield Scientific School, Yale University.
Dietary Administration—E. M. Geraghty:

1. General principles of hospital dietetics.
2. General principles to be observed in buying dairy products.
3. General principles to be observed in buying meats.
4. General principles to be observed in buying staples.
5. General principles to be observed in buying canned goods.
6. Contracts.
7. Equipment:
   - Manufacture.
   - Value.
   - Placement.
   - Care.
8. Factors influencing efficiency of employees.

PRACTICAL WORK

Diet Laboratory (2 months)
Dietetics of special diseases:

1. Planning, preparing, and serving of food for patients requiring dietetic treatment.
2. Computing and recording value of food intake of above mentioned patients.
3. Preparing feedings for infants.

Kitchen (1 month)
Supervision of requisitioning of food supplies.
Supervision of care and storage of food supplies.
Supervision of preparation and distribution of food.
Supervision of care and utilization of left-overs.
Supervision of cleaning of kitchen.
Supervision of employees in kitchen.

Serving Room (1 month)
Inventory of dishes and silver.
Supervision of care of same.
Supervision of service of food.
Supervision of cleaning of rooms connected with serving room.
Supervision of care of stationary equipment.
Organization of work of waitresses and pantry workers.

Office (1 month)
Dietary studies.
Menu-making.
Cost accounting.
Visit to Food Inspection Laboratory at State Experiment Station.
Study of milk industry in New Haven.
Study of ice-cream industry in New Haven.
Study of market conditions in New Haven.
Preparation of outline for teaching nurses dietetics.
Teaching nurses dietetics.
Outlining equipment for dietary department of 250-bed hospital.
Routine office work.

While here, do some problem in hospital dietetics; nature of problem to be determined by need of individual.
Visits to other hospitals, followed by report on dietary departments.

THE NEEDS AND PROBLEMS OF THE SMALL HOSPITAL IN CHINA

Medical Missionaries Hampered by Too Much Administrative Work—Assistants Greatly Needed—Possibility of Training Natives to Meet the Emergency

The needs and problems of the smaller hospitals in China naturally fall under three headings, says Dr. J. Preston Maxwell, of Yungchun Fu, in the *China Medical Journal*. These are administrative, medical, and nursing. For many years there will be difficulty in obtaining foreigners for the staffs, even if the financial obstacles are overcome, for the men and women needed may not be forthcoming, hence the possibility of training natives should be considered.

The fact that much of the strength of the medical missionary has had to be given to administrative work has militated against his missionary and professional efficiency. One great difficulty has been the indirectness of the Chinese as a people. Tact and firmness are valuable in a large hospital, and Dr. Maxwell doubts the possibility of educating the average Chinese for this work. Men trained by the Y. M. C. A., and also in the special work of hospital administration would be useful for the inland hospitals. They should know something of accounting, statistics, catering, and whatever else might be necessary for helpfulness. This training should be flexible to enable them to adapt themselves to local conditions as assistants to the medical missionary. For this reason it is desirable that they be trained where they are to be employed.

Medical assistants constitute the greatest need of the doctor. The present good postal service is a help since much of the laboratory work may be done in the teaching centers, enabling the country hospitals to benefit by it. Wassermann tests, bacteriological examinations, and serum tests may thus be placed within their reach. Opportunities also may be had for expert advice.

A special class of pathological assistants should be established which might carry out locally examinations of urine, feces, and sputum and do some of the bacteriological work, and preserve and transmit specimens to the teaching center.

Lads having a good school course might be selected for intensive work in these centers. A year's preparation in clinical work in pathology might enable one to be of assistance in a country hospital.

Post-graduate classes may be arranged in future for those who have not had the benefit of full medical courses but have proven themselves useful in practical service. This should increase their value to the hospital.

In the nursing problem the same factors apply, the lack of money and of people. There is little doubt that the female nurse eventually will win in China as elsewhere, but at present young women should not work in male wards. Men should be employed for their own sex and both should be under a capable foreign nurse. With the loyal support of the medical staff such a woman should have no difficulty in managing the nursing. She should have at least one male and one female nurse fully trained under her. A control bureau should have charge of all trained Chinese nurses to which hospitals could apply for nurses.

Short courses of post-graduate study should be arranged for the doctors themselves.

This work should be strengthened, both from the missionary and the medical standpoint, but the burden that now rests upon the doctor's shoulders should be lightened.

HOSPITAL, MEDICAL AND SPECIAL MEETINGS

BRITISH COLUMBIA HOSPITAL ASSOCIATION CONVENTION

Second Annual Meeting Held July 8, 9, 10, Was Most Successful—Interesting Papers Read—Work Practical and Promotional—Officers Re-elected for the New Year

For the second time in the history of British Columbia the hospitals in the Province were called together. Last year, at the suggestion of the board of directors and superintendent of the Vancouver General Hospital, a very successful meeting of the representatives of all hospitals in British Columbia was held in Vancouver. The formation of a very active organization, known as the British Columbia Hospital Association, resulted. The officers elected last year were: Hon. J. D. McLean, Victoria, honorary president; Dr. M. T. MacEachern, Vancouver, president; Robert S. Day, Victoria, first vice-president; Mayor Gray, New Westminster, second vice-president; Mrs. M. E. Johnson, Vancouver, secretary, and Dr. C. H. Gatewood, Vancouver, treasurer.

The convention this year was held in Victoria, July 8 to 10. The exhibits were extensive and full of interest, including hospital equipment, supplies and furniture; also exhibits were made by various hospitals, and especially an interesting display of vocational work. The soldier's civil reestablishment and the C.A.M.C. had a most extensive display of work done by soldiers in the hospital. In addition a fine exhibit was shown from the incurable patients in the Vancouver General Hospital annex at Marpole, many of the articles being the work of blind men. Two other splendid exhibits were from the Provincial Royal Jubilee Hospital and from the St. Joseph's Hospital, both of Victoria, demonstrating valuable articles and equipment in these hospitals as well as charting, etc.

Distinguished Speakers Open the Gathering

His Excellency, the lieutenant-governor of British Columbia, Sir Frank Stillman Barnard, was in attendance at the first session, and declared the convention open, officially. Addresses of welcome followed, by the provincial secretary, Hon. J. D. McLean, his worship, Mayor Porter, of Victoria, and Mr. R. S. Day, president Provincial Royal Jubilee Hospital board. The response was made by Mr. Charles Graham, president of the Cumberland Hospital board.

The convention was particularly fortunate in having a number of Eastern leaders in the nursing profession in attendance. Among these were Miss Jean Gunn, R.N., president of the Canadian National Association of Trained Nurses, Miss E. G. Flaws, president of the Canadian Association of Nurse Education, and Miss Isabel M. Stewart, professor of nursing, Columbia College, New York. During the opening session Miss Gunn and Miss Flaws spoke, the former outlining the policy recommended by her association for a national nursing service, when a large number of volunteer aids would be trained to serve under the Canadian Red Cross and Victorian Order of Nurses in time of emergency and need. Miss Flaws dwelt at length on the need of higher education as a proper basis for training nurses.

A most masterly and interesting address on "The Ministry of Healing," followed by the Reverend Father O'Boyle, director of the Catholic hospitals of British Columbia. He dwelt on the very serious calling or duty of the hospital and its workers and impressed all present with the responsibility which was theirs.

President's Address

Dr. Malcolm T. MacEachern, of Vancouver, president of the association, spoke on "The Hospital of Today," picturing a more standardized hospital than we generally have and indicated the work that he expected to cover during the convention. He also laid stress on the essentials for development, especially a cooperative spirit in the personnel participating in the daily work of the hospital, the board of directors, or trustees, chief executive officer, the various staffs, patients, auxiliaries, the public and the press. There must be harmonious organization covering the institution.

Standard Curriculum Proposed for Training Schools.

Miss Helen Randal, R.N., registrar B. C. Graduate Nurses' Association and editor of the *Canadian Nurse*, addressed the convention on "A Standard Curriculum of Study for B. C. Training Schools for Nurses." She emphasized the need of standardizing all things in connection with the hospitals, including boards of directors, superintendents and other officials, in indicated clearly how some of the difficulties now experienced in training schools connected with the smaller hospitals might be obviated by affiliation with larger hospitals for the third-year work. The nurse from the smaller hospital would thus get a broader training in the subjects of the final year.

Miss J. F. MacKenzie, R.N., president of the B. C. Graduate Nurses' Association, presented a detailed curriculum of study to be used in the training schools of British Columbia, which had been approved by the B. C. Nurses' Association. Undoubtedly this will greatly aid the training schools in British Columbia to give nurses a more uniform training. This curriculum will be printed and copies will be sent to the various schools. During the interesting discussion that followed the university nursing arrangement (described in Dr. MacEachern's article, pp. 70 and 143, July and August, and in August, news) came up and was explained clearly to the audience by Dr. MacEachern, who pointed out how greatly it would help the smaller training schools, as well as larger ones.

The paper of Miss K. Stott, R.N., assistant superintendent Royal Columbian Hospital, New Westminster, on "Post-Graduate Work," was read in her absence by Mrs. Broom, of Vancouver. The value of such courses was outlined and the scope, and achievement expected was indicated.

Rural Public Health Nursing

Miss J. Forshaw, R.N., Victorian Order of Nurses, who is engaged in public health work in the Saanich district, presented a most interesting paper on "Rural Public Health Nursing," indicating clearly the extensive field now open and the scarcity of workers for it. She offered a resolution which the convention passed unanimously, recommending the establishment of a course in public health nursing in the University of British Columbia.

Dr. R. H. Mullin, director of laboratories, Vancouver General Hospital, and head of the department of Bacteri-

ology, University of British Columbia, covered the great problem of public health nursing service for the Province, emphasizing its economic value. He concluded with an outline of the organization, or machinery, necessary to carry on such a service. He recommended that there should be a health commission appointed by the Lieutenant-Governor of British Columbia; that there should be a commissioner of public health with different bureaus, such as vital statistics, publicity and education, communicable diseases, sanitation, food and drugs, mothers and children and mental hygiene, all of which should work harmoniously with existing municipal and other departments interested in the work.

Following the discussion of Dr. Mullin's paper a resolution was passed by the association approving the establishment of a public health service as outlined therein, and recommending it to the Provincial Government.

The child welfare and other organizations of Vancouver presented a petition to the association recommending that a lock hospital for venereal cases and those addicted to the drug habit, be established in British Columbia. It was the sentiment of the convention that such hospital was needed and a resolution to that effect was passed but the term "lock" was not favored.

Hospital Case Records Treated in Discussion

In a paper on "Case Records in British Columbia Hospitals," presented by Dr. T. E. Ponton, director of medical records, Vancouver General Hospital, he told of the manifold difficulties offered in the work and how he had overcome them. He outlined the system used in the Vancouver hospital and demonstrated it with lantern slides. A catalogue of the forms now in use in this hospital was presented to each hospital represented, and emphasis was laid upon the necessity for having a system to preserve the records for all hospitals.

A resolution was passed that the hospitals of British Columbia establish a system of records for cases and that, so far as possible, that outlined by Dr. Ponton, as now in use in the Vancouver General Hospital, be adopted.

Various Social Features Entertain the Delegates

The Rotary Club of Victoria gave a ride to the members of the convention, taking them to points of local interest. On their return a reception was held at the Nurses' Home of the Provincial Royal Jubilee Hospital, where Miss J. F. Mackenzie, superintendent of nurses, Dr. Rogers, medical superintendent, and Mr. R. S. Day, president of the board of directors of the hospital received. After an inspection of the hospital, tea was served.

Hospital financing attracted considerable attention at the evening session, all agreeing as to its importance. The subject of maternity hospitals, next on the program, was opened by a paper by Dr. A. G. Price, of Victoria, medical health officer of the city, who read a paper on "Maternity Hospitals in Relation to Public Health," in which he earnestly called attention to need for greater interest and importance being attached to maternity work throughout the province.

State Assistance Should Be Given Maternity Work

Dr. Price pointed out the necessity for more state aid, and cited how often poor financial circumstances were detrimental to the rearing of children. That the state owed much to the individual, in endeavoring to obtain such measures as would make it possible for all needing hospital care of the highest grade to get it, was pointed out by Mr. J. J. Banfield, a director of the Vancouver General Hospital, in his address on "A New Basis of Financing Hospitals in British Columbia."

That many persons who needed such care were unable to pay for it was emphasized. There were two classes of people, Mr. Banfield said, who could secure the most modern means of diagnosis and treatment: one, the very rich, because they could pay for it; the other the very poor, because they could not pay for it. The middle class, the "backbone" of the country, persons who were earning a comfortable livelihood, found that when sickness overtook their families they were forced to forego certain means for special diagnosis and treatment, very often to such an extent as to militate against recovery.

Mr. Banfield stated that many cases coming to the hospital naturally would forego running up large bills, which would be necessitated if they were to take advantage of the facilities required. He advocated state aid to support a hospital up to a public ward rate, including all extras for special diagnosis and treatment. Any patient desiring more luxurious accommodations, or conditions which would not have a bearing on diagnosis or treatment, could pay for such extras. This would mean a distributed taxation or a poll tax of approximately $6 a person a year for all between the ages of eighteen and fifty years. Under such arrangement less money would be spent on hospitals than is now. The speaker outlined an organization necessary to carry out this plan, consisting of a hospital commission of three, a general superintendent of hospitals, under whom would be three executive officers, a medical superintendent, a business superintendent and a nursing superintendent. He stipulated that all hospital boards now in existence should work under this commission.

Mr. R. S. Day, president of the board of directors of the Provincial Royal Jubilee Hospital, in a paper entitled, "More State Aid for Hospitals," followed lines of the preceding address, emphasizing the urgent need of hospitals receiving state aid similar to that given other public institutions, such as education, police, and the like. Both papers were of great interest, precipitating keen discussion.

A medical delegation from Vancouver desired that no action be taken until the medical profession had time to look into the matter, as it was felt that it might interfere materially with their interests. It was finally resolved that a committee be appointed from the British Columbia Hospital Association to cooperate with the medical profession and the bodies interested in the whole matter of state aid to hospitals and the financial status of the various hospitals in British Columbia, with a view to making recommendations to the government at its next session.

Work of the Women's Auxiliaries for Hospitals

Mrs. E. Hasell, vice-president of the Woman's Auxiliary of the Provincial Royal Jubilee Hospital read a paper on "The Relations of the Woman's Auxiliary to the Hospital," impressively pointing out the important place that the auxiliary held and the aid it could be in the work of a hospital. The scope and methods of such auxiliary was defined, especially various ways in which funds could be raised for hospital work.

Dr. C. H. Vrooman, medical director, Rotary Clinic for Chest Diseases in Vancouver, in an address on "Hospitals and Tuberculosis," outlined the duty of the general hospitals in British Columbia, inasmuch as they were required to take advanced cases of tuberculosis. The great lack of accommodation for such cases was pointed out and he convinced his hearers that the general hospitals must take more interest in this class of cases. A number of instructive slides were shown, including views of the Tranquille Sanatorium and the Tuberculosis clinic of Vancouver.

The Committee on Development of the Association presented the following recommendations: (1) that the association recommend to the government that as many of the hospitals throughout the Province as found it financially impossible to attend or send delegates to the convention should receive state aid to do so; (2) that the association be divided into three departments, namely, medical, business, and nursing, with three convenors outside of Vancouver and Victoria, who should arrange the program for the next convention; (3) that a standardization committee be appointed consisting of nine members, with a general convenor, and that there should be three committees consisting of three members each, one committee on the business department, one on the nursing department, and one on the medical department of the hospitals. These committees should during the year endeavor to bring all these departments in various hospitals to a greater efficiency or standard. They also should act as an information bureau in case any hospital desired information on hospital matters. It was decided that the next meeting would be held in Vancouver in connection with that of the Canadian Medical Association, either just before or after, so that the exhibits shown might answer for both organizations.

Officers Reelected for the Ensuing Year

The officers for the previous year, as named at the head of this report, were reelected with the following as executive committee: Dr. F. X. McPhillips, Vancouver; Miss M. P. Macmillan, Kamloops; Charles Graham, Cumberland; Miss L. S. Gray, Chilliwack; Dr. W. E. Wilks, Nanaimo; M. L. Grimmett, Merritt; D. G. Stewart, Prince Rupert; Dr. H. G. Wrinch, Hazelton; Rev. Father O'Boyle, Vancouver, and Miss J. F. Mackenzie, Victoria. The meeting then adjourned.

Delegates and their friends visited St. Joseph's Hospital where an interesting inspection of the hospital was made and the sisters in charge were most hospitable. A reception at Government House followed, the party being received by His Honor, the Lieutenant-Governor, Sir Frank Stillman Barnard and Lady Barnard.

On invitation from Miss J. F. Mackenzie, superintendent, and the board of directors of the Provincial Royal Jubilee Hospital, the convention attended the graduating exercises of the training school for nurses connected with that hospital. A reception followed. As the members finally dispersed it was voted that a most successful convention had closed, inasmuch as real work had been done and constructive hospital administration and development had marked each session. All expressed appreciation for the hospitality, kindness and courtesy received during their stay in Victoria.

A Club for Blinded Soldiers

Unique among the plans for returned war cripples is that developed by Toronto, Canada, for the care of her blind soldiers. The Queen City will shortly have the distinction of having the only blind soldiers' club in Canada. Named after Sir Arthur Pearson, the blind founder of St. Dunstan's, Pearson's Hall will be a home in every sense of the word for blinded soldiers who have no one to care for them—a place where they will not only be able to find a welcome retreat and enjoy the fine social atmosphere of the club, but one where they may also secure permanent board and lodging if they so desire.

Seventeen rooms compose the spacious residence which at present houses the club. On the lower floor are the reception room, recreation room, dining room, kitchen, and a class room, while upstairs are twelve bedrooms and a workroom.

QUERIES AND ANSWERS

Simple Form of Registry for Small Hospital

To the Editor of THE MODERN HOSPITAL:

We are considering conducting a registry for nurses in connection with our hospital. Can you give us any information regarding the matter? We do not want anything very complicated or difficult to manage.

SUPERINTENDENT OF A SMALL HOSPITAL.

When a hospital conducts a registry it is intended solely for the convenience of the hospital and its staff, and its graduate nurses. The method of procedure is to have each pupil, after finishing her training and being ready for work, register her name, address and telephone number in the office of the school. This is sometimes the duty of the assistant superintendent to attend to, or, if the hospital is a large one, it may take the entire time of one person. She receives all telephone calls and assigns nurses to the cases.

There are many mechanical contrivances called "registers" that are used for the convenience of the registrar in keeping track of the nurses, whether they are on cases, or subject to call. Usually no fee is exacted of the nurses for registering, as the convenience to the hospitals and the doctors is very great. The only case in which I have known of a registry being run in connection with a hospital with success has been where it was made the sole duty of one person who was able to become well acquainted with the capacities and limitations of the nurses, and the special requirements of the doctors who use that registry.

Staff Members on the Board of Trustees

To the Editor of THE MODERN HOSPITAL:

We are anticipating the erection of a new hospital in our community and are quite interested and hope to make this a success. Considerable discussion has taken place regarding the trustees, whether they should be composed of leading business men, or whether the majority should be of physicians in active medical service. Your answer to the foregoing will be valued.

CITIZEN OF A WESTERN STATE.

The views of THE MODERN HOSPITAL on the question of the propriety of allowing members of the hospital staff to serve on the board of trustees, may be inferred from the editorial entitled, "The Hospital and the Board of Trustees," published in the July issue of THE MODERN HOSPITAL, page 41. In that editorial the principal duty of the board of trustees was defined as that of seeing that all the responsibilities, both of the administrative and the medical staff, are properly met. If this be so, it follows that no one who is a member of either administrative or medical staff can with any propriety be a member of the board of trustees. It would be like permitting a bookkeeper to audit his own books. This is not an empty theory; where the duties of the trustees are not thoroughly appreciated, physicians practicing in hospitals have not infrequently been elected to the boards of trustees—generally, it is safe to say, with unsatisfactory results. Where the principles underlying the trustees' position are clearly understood the question will never arise.

DISPENSARY AND OUT-PATIENT WORK

Conducted by MICHAEL M. DAVIS, Jr.
Director of the Boston Dispensary.
Please address items of news and inquiries regarding Dispensary and Out-Patient Work to the editor of this department, 25 Bennett street, Boston, Mass.

PREPARING STATISTICS IN VENEREAL DISEASE CLINICS

Statistics the Means of Measuring the Progress of Civilization—Reports Required by the United States Public Health Service—Three Classes of Forms Essential

BY MICHAEL M. DAVIS, JR., Director of the Boston Dispensary, and BERTHA CHACE LOVELL, Social Worker, Boston Dispensary, Boston, Mass.

Dr. S. N. D. North calls statistics "the chief instrumentality through which the progress of civilization is measured, and by which its development hereafter will be controlled." Certain it is that if we wish to know what our medical and social work in venereal disease clinics is accomplishing; in which sections we are succeeding, and in which failing, we must depend on reliable clinic statistics.

Three forms for making statistical records are given herewith, as the best mode of presenting in a practical way the actual methods of keeping statistics. The following explanation of the use of each form may seem detailed, but it is just such details which the clinic worker wants to know.

The system herein outlined enables the reports required by the United States Public Health Service to be filled out readily and accurately. It is not an elaborate or complex system, once it is understood. It takes very little time to keep up. In a clinic which is carrying on its active list even several hundred patients, the making up of the monthly statistical sheet takes only about an hour a month.

DAY BOOK FOR VENEREAL DISEASE CLINICS[1]
Month.....

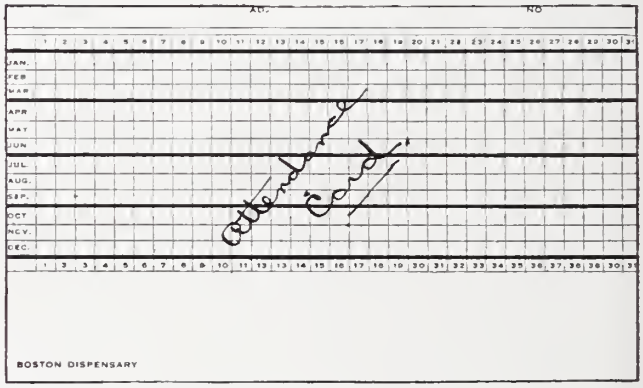
Date	Disp. No	Name	D. of H. No.	Age and Marital Status	Residence	Stage of Disease	Remark

The three forms are: (1) the day book; (2) the attendance card; (3) the monthly statistical sheet.

The Day Book.—Each new patient is entered by name in a day book under the date of his first appearance in the clinic. Here, too, is entered his age and address, his dispensary number, his State Department of Health registration number (if he has one), his diagnosis, the individual, agency or institution referring him, and the date and circumstances, both medical and social, of his departure from the clinic. A patient who is reinstated in the clinic is entered also in the day book in a different colored ink, and reference is made to the page on which he was originally entered. Only the reinstated patient appears in the book more than once.

Attendance Card.—This special form of card is used to check the attendance of the individual patient, a cross (x) being made under the appropriate date to indicate a visit. When the patient is discharged, the date and circumstances, medical and social, are indicated just as in the day book. The first cross on the card (unless the patient was first admitted in a previous year, in which case the full date is written in) will indicate the date on which the patient's name was written in the day book.

There are statistically only two possible main classifications for a case; active and closed. The case which is not the one must be the other. When the patient has withdrawn from the clinic, and the clinic executive, or whatever person is keeping the statistics, is not warranted in expecting his return, the attendance card is placed in a special drawer or box. The cards put into the box during the current month are kept in a section by themselves. These cases are considered "closed." This "closed" box or cabinet facilitates easy reference.



Attendance card used in the Boston Dispensary. The original measures 3 by 5 inches.

Monthly Tabulation of Statistics.—Each clinic has a statistical sheet which covers a twelve-month period. When the statistical sheet is first started, the clinic executive counts up the number of attendance cards in the active list (this will include all the attendance cards in the clinic except those in the "closed" box) and uses this figure to represent the number of "old" cases for which she is responsible. This is the only time, so far as the statistical sheet is concerned, when the attendance cards representing the active cases need to be counted.

On the first of each month the clinic executive adds to the number representing the "old" cases, for whom she was responsible on the first day of the preceding month, the number of new and reinstated cases assumed by the clinic during that month. The latter she obtains from the day book. From the resulting total—the total number carried during the month—she subtracts the number of cases closed during the month. This she obtains by counting the number of attendance cards in the current monthly section of the "closed" box. The resulting figure gives her the number of cases to be carried over into the

[1] In many dispensaries syphilis is treated in the dermatological clinic and gonorrhea in women in the gynecological clinic. In such mixed clinics, therefore, a decision has to be made regarding each patient, as to whether or not he should be considered a venereal case. Patients in the dermatological clinic may be considered venereal, for statistical purposes, if the doctor who takes the medical history and makes the physical examination proceeds as the syphilologist proceeds in hunting down a syphilitic infection. A certain proportion of non-syphilitic cases will, therefore, be included in the figures for syphilis. The same rule, substantially, holds for the women with gonorrhea. If the patient, upon history taking and vaginal examination, is considered clinically suspicious or positive, or even if she is found to be negative, but has come in for the purpose of finding out whether she does or does not have gonorrhea, she is counted in the gonorrhea statistics. Only in this way can the true bulk of the venereal disease problem presenting itself to the dispensary be estimated.

next month, as "old" cases. This procedure is repeated monthly.

The statistical sheet includes the analysis of the manner in which the closed cases leave the clinic, figures for each month being entered under that month, as follows:

Old Cases
New and Reinstated
  New
  Reinstated first time this year
  Reinstated previously this year
Total Active
Closed
  Negative
  Not in need of further medical treatment
  Letter returned unclaimed
  To other medical care
  Failed to respond to follow-up
    Responsibility with clinic
    Responsibility with outside agency
  Died
Total Closed
Total Patients on Active List

At the end of the year the following totals are easily obtained by adding up the columns for each month.

New patients
Reinstated Patients
Total Patients carried (including old, new and reinstated)
Total closed, in each of the ways mentioned above.

From these totals it is very easy to figure the percentage of cases who left the clinic under unsatisfactory conditions; to visualize the growth of the clinic; and to determine *accurately* (and without the knowledge of the total number of individual patients this is not possible) the average number of visits per patient.

BOOKS RECEIVED FOR REVIEW

The Hospital As a Social Agent in the Community. By Lucy Cornelia Catlin, R.N., Director of Social Service Work and Executive Director of the Out-Patient Department, Youngstown Hospital, Ohio. Cloth, pp. 109, 43 illustrations. W. B. Saunders Company, Philadelphia, 1918.

Surgical and War Nursing. By A. H. Barkley, M.D. (Hon.), M.C., F.A.C.S., Lecturer at Good Samaritan Hospital Training School for Nurses; Consulting Surgeon, Good Samaritan Hospital, Lexington, Ky. Cloth, pp. 201, 114 illustrations, $1.75. C. V. Mosby Company, St. Louis, 1918.

Physiology for Nurses. By William Gay Christian, M.D., Professor of Anatomy, Medical College of Virginia, and Charles C. Haskell, M.A., M.D., Professor of Physiology and Pharmacology, Medical College of Virginia. Cloth, pp. 165, 34 illustrations. C. V. Mosby Company, St. Louis, 1918.

How to Take Care of the Baby. A Mother's Guide and Manual for Nurses. By Francis Tweddell, M.C., Fellow of the New York Academy of Medicine; Late Physician to the Babies' Hospital Dispensary, New York. Third edition, revised and enlarged. Cloth, pp. 175, illustrated, 75 cents. The Bobbs-Merrill Company, Indianapolis.

Diet for Children. A Complete System of Nursery Diet with Numerous Recipes. By Louise E. Hogan, Author of "How to Feed Children." Cloth, pp. 142, illustrated, 75 cents. The Bobbs-Merrill Company, Indianapolis.

Reference Hand-Book of Gynecology for Nurses. By Catherine Macfarlane, M.D., F.A.C.S., gynecologist to the Woman's Hospital of Philadelphia. Cloth, pp. 151, with 71 illustrations, $1.50. W. B. Saunders Company, Philadelphia, 1918.

Reconstruction Therapy. By William Rush Dunton, Jr., M.D., Assistant Physician at Sheppard and Enoch Pratt Hospital, Towson, Md.; Instructor in Psychiatry at the Johns Hopkins University; President of the National Society and of the Maryland Society for the promotion of Occupational Therapy; Secretary of the Maryland Psychiatric Society. Cloth, pp. 236, with 30 illustrations. W. B. Saunders Company, Philadelphia, 1919.

Bacteria and Protozoa, the Nurses' Textbook Series, by Herbert Fox, M.D., Director of the William Pepper Laboratory of Clinical Medicine in the University of Pennsylvania, Pathologist to the Zoological Society of Philadelphia, Major M.C., U. S. A. Third edition, revised. Cloth, pp. 222 with 68 engravings and 6 colored plates, $1.75. Lea & Febiger, Philadelphia, 1919.

LETTERS TO THE EDITOR

Hospitals as War Memorials

To the Editor of THE MODERN HOSPITAL:

At a time when probably every community in the country is considering a memorial of some character to its soldiers and sailors it behooves those interested in hospitals to set forth the advantages of these institutions as memorials.

The National Committee on Memorial Buildings, in a series of pamphlets, recommends for the purpose a community house containing an assembly hall, gymnasium, swimming pool, game rooms, club and recreation rooms and other features; also accommodations to "provide for the preservation of names, memorabilia and relics of the Great War . . . exhibits of trophies, flags and other physical records"; they state further that "every memorial building must have a Hall of Fame, embracing a war museum and library."

The following are excerpts taken from articles on war memorials, chiefly from architectural publications, and other sources as noted:

"The preponderance of opinion is strongly in favor of memorials which combine utilitarian features with artistic merit."

"It is everywhere recognized that a type of memorial is demanded that will differ materially from that erected by past generations in honor of previous military achievements . . . the spirit of the war has been service. Let us carry this spirit to our memorials and make them intimate parts of the lives of the people, not awe-inspiring piles of granite or marble."

"Instead of spending millions of dollars in monuments, in statuary and arches, let us devote the sum to more useful and helpful purposes, let us endow and build hospitals or add wards to hospitals for the service and ever-ready use of our soldiers and their families when they may be in need of medical and surgical care. . . . We need something bigger than merely abstract art ideas for the future in our war memorials. Let us have them humanized and made to minister to human needs and human aspirations."

"The erection of statues and shafts and mausoleums belongs to the old era of kings. The appropriate monument for a democracy is a warm and useful structure that shall be an integral part of the people's life." Dr. Frank Crane.

"It will be a great change for the better if we can make our war memorials of real use to each community." James R. Garfield, Ex-Secretary of the Interior.

"No mere shaft of marble or granite can ever symbolize a democracy for which this world war is being fought. Let our memorials of the conflict be structures which shall help the living while commemorating the dead." The American City.

No building or institution should make a more fitting memorial than a well-designed hospital. It can be made to benefit directly the discharged soldier and sailor and

their families by offering hospital service either without charge or at a reduced rate of charges.

The hospital can, through its social service department, look after the proper care of those who have been injured or invalided in the service.

Such a hospital can be made either a memorial to some distinguished soldier or sailor of the community or to those who represented the community as a whole at the front. The entrance lobby or a specially designed room can be provided for memorial tablets, relics and souvenirs of the great war.

There are few hospitals which do not need either entirely new buildings or enlargements to their present plants to meet the growing requirements of the community and the present is a most opportune time to make an appeal for the necessary funds.

The Elks' Society have erected, at their own expense in Boston, a large hospital for the care of soldiers. Rotary clubs in various centers have taken action towards establishing memorials of various kinds; as yet there is scarcely a community that has settled the question and this is the time for those interested to direct public attention to the advantages of a hospital or hospital pavilion as a "victory memorial building."

L. H. LEWIS,
Crow, Lewis & Wick, Architects, New York City.

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Health Workers for "Foreign" Settlements

To the Editor of THE MODERN HOSPITAL:

The public health movement progresses by leaps and bounds and the search for qualified workers goes merrily on. Of training nurses, attendants, social workers, visiting teachers, et al, there seems to be no end—but the fact remains that the best public health worker for any given community ought to know the language and traditions of that community, and to sympathize sincerely with its people and their problems.

The public health nurse should be able to teach health lessons in the schools in English, and equally able to teach health lessons in the home in the language commonly used there. It follows that the best worker for a foreign settlement should have at least a full high school course, be a graduate from a recognized training school for nurses, and a native of the race composing the settlement. It goes without saying that she should have special training in public health teaching and nursing.

In our sparsely settled southwestern states we have many towns composed wholly or largely of Mexicans. True, most of them were born in the United States, but they are still Mexican in language, manners, and traditions. The language is Spanish of a sort and is easy of acquisition. However, given the ability to make one's meaning plain in Spanish (or the Mexican equivalent of Spanish), there yet remains the colossal ignorance of most of us as to the racial customs and the causes back of them. Workers from their own race could understand and handle conditions better.

In Arizona children must attend school between the ages of six and sixteen. This applies to *all* children, including Mexicans, and is enforced. It seems to me that the best means of training health workers is to encourage all pupils to remain in the schools until graduation. There will be a very few Mexican girls who will escape early matrimony and seek to become truly independent. These can be guided, encouraged, and assisted to take training as social workers among their own people.

We have one fine girl who will graduate from high school in 1920, and will then enter training. The task is to convince her of the necessity of going far enough away from home to enter a real training-school, and of taking special training after she graduates as a nurse. I feel justified in offering to assist this girl in obtaining a public health scholarship, to enable her to become well qualified to work among her own people.

Americanization work is at last being undertaken in earnest, and a foreign family is never so truly Americanized as when the home standards of health and sanitation approximate those of their American neighbors.

I believe young high school girls of different nationalities should be urged, and, if they are poor, be subsidized, to fit them to teach the work among people of their own race. Given a good education in English, there is no reason why they should not serve the entire community, as well as the "foreign" suburb.

In Cuban hospitals, under the United States administration, the first care was to train Cuban nurses to run the institutions after the nurses from the United States should have withdrawn. Our missionary hospitals in oriental countries find that the only way to get real public health work done in the villages is to train native men and women to do it. We should find it easy to do the same in our own United States, where we have the advantage of the public schools for all and excellent schools for special training. If we need more scholarships, at least in the generous West, any public health worker can easily raise a loan fund for a really capable and earnest student. We shall never make the most of our "foreign" citizens until we shall have educated them to do without us and to furnish at least a few of their own social workers.

LUELLA M. ERION,
Welfare Nurse, Public Schools of Winslow, Ariz.

SIBERIA HAS NINE RED CROSS HOSPITALS

Work of the American Red Cross of Vladivostok, Omsk, Irkutsk and Other Siberian Cities

Drugs, clothing, foodstuffs and miscellaneous supplies valued at $5,254,349, which have been shipped to Siberia by the American Red Cross during the last nine months, have been distributed over an area of 4,000 miles abutting the Trans-Siberian railway. Every ten days a Red Cross supply train of twenty-six cars loaded with medicines, surgical dressings, foodstuffs and refugee garments leaves Vladivostok to administer to the relief of the needy civilian population and to restock the nine hospitals operated by the Red Cross in Siberia. These hospitals, several of which are used exclusively in caring for wounded Allied and Russian soldiers, have a total bed capacity of 4,000. Seventeen relief trains have been sent out by the Red Cross to date.

These figures concerning the work of the Red Cross in Siberia were made public at Red Cross Headquarters recently by Lieut.-Col. R. B. Teusler, who has directed the relief work of the organization in Siberia for more than a year. Colonel Teusler, an American doctor, has for some years past, been in charge of St. Luke's International Hospital in Tokio, an institution maintained by the Board of Foreign Missions of the Episcopal Church.

The headquarters of the commission are located in Vladivostok, where two of the largest Red Cross hospitals are maintained. A number of American doctors and nurses are included in the personnel. New hospitals were established recently at Irkutsk and Chelyabinsk, the latter being one of the most important of the base hospitals now looking after the care of the wounded men of the Kolchak government forces.

THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment, and Administration of Hospitals, Sanatoriums, and Allied Institutions, and to Their Medical, Surgical and Nursing Services

Vol. XIII — *October, 1919* — No. 4

THE FUTURE TASKS AND PROBLEMS OF THE AMERICAN HOSPITAL ASSOCIATION*

Establishment of Service Bureau on Dispensaries and Community Relations of Hospitals—Projected Employment Bureau—Affiliation of State and Sectional Hospital Associations—Public Health Laws and Hospital Standardization Among Problems for Consideration

By A. R. WARNER, Pres. American Hospital Association 1918-19, Superintendent, Lakeside Hospital, Cleveland

SIGNAL progress in many, and, in fact, practically all lines of human endeavor has arisen from the extreme stimulus to all action brought about by wars. In these periods the general grouping of humanity into men who are ruled by the past and men who are ruled by the future is disturbed by the struggle emphasizing the fact that it is the future in which we are vitally interested. The past is gone, and precedent is really powerless. In these periods, traditions, customs and many of the apparently fixed features of human life are broken down, and people are forced by necessity and led by the habit of extreme efforts to strive as never before to find the ways that produce better results. The big problem before hospital administrators today is to recognize these movements of force and reform now appearing, judge them accurately, and contribute the full weight of their personality and institution to their guidance and to the accomplishment of permanent results for good.

It is the duty of this Association to review carefully and critically its organization, traditions, methods, and forms of procedure and work, and also to thoughtfully consider all possible lines of usefulness that it may be prepared to recognize in time opportunities for service and to keep the internal machinery adapted and adequate to the position it can and should hold today.

At the last meeting the constitution was changed to provide for institutional membership, believing that in time it would be the predominating membership and the American Hospital Association would become in fact as well as in name the Association of American Hospitals, representing, aiding, and speaking for the American hospitals in the same sense and to the same degree as various other national associations represent and aid their particular industry and their constituent members. Without any pressure or coercion in any way, 208 hospitals have become institutional members contributing $6,975.00 to the support of the Association and with 624 representatives qualified to vote in their meetings. This number is growing steadily, and your officers have been pleased with these results.

There is no mistaking the fact, however, that, although institutional memberships are quite desirable for many reasons, they bring to the Association new and greater responsibilities. While the responsibilities to the individual members have been quite satisfactorily discharged by an annual conference and a printed report of the proceedings, this is not sufficient to justify institutional membership. It is necessary that the American Hospital Association render to the constituent hospitals positive service having practical usefulness and a definite value in comparison to which the annual sum paid shall be relatively small. Recognizing this, the trustees have approved a general policy of service bureaus and have attempted to make a beginning, sufficient to show our good faith, before this convention. One service bureau has been definitely established.

*Presidential address read before the Twenty-first Annual Convention of the American Hospital Association, Cincinnati, September 9, 1919.

The field of this covers dispensaries and the community relations of hospitals. The part time of Mr. Davis, the director of the Boston Dispensary, has been secured for this work. In matters of advice or discussion of plans by correspondence the services of Mr. Davis are absolutely free to the institutional members. Whenever it is mutually agreed as advisable that Mr. Davis conduct a personal investigation on the ground, the cost of this to the members of the Association will be only the actual traveling expenses. The personal services of Mr. Davis are provided by the Association. We have discussed service bureaus in several other lines, but as yet there is nothing definite to report. Already there has been criticism of the Association—and justly so, because we were not providing a dignified return in service to institutional members. One service bureau is only a beginning. A more extensive development of the policy is necessary for next year.

The Association has arranged with the Red Cross the basis and details of the distribution of a large amount of dressing gauze free to the hospitals except for transportation charges, and some has been already distributed. Forty-nine million yards was definitely promised. It was interesting, as well as exasperating, to find that out of 3,089 circulars mailed to hospitals offering this gauze free and asking a prompt reply giving the data the Red Cross desired, only 741 answered within the week limit, and only 814 ever answered. A second letter was sent to 2,433 hospitals not answering the first letter and 675 answers have been received.

At present the Association is negotiating with the War Department in regard to the sale of large stocks of hospital supplies which it has on hand. We hope to get some quite attractive arrangements by using the Association as the jobber.

The Association should give thought and attention to the establishment of an employment bureau for the finding of suitable persons for vacant positions in hospitals and suitable positions for our personal members out of employment. During the past year the secretary has done informally a considerable amount of this work, with results fully justifying the effort. This, as any employment bureau, will become progressively more efficient with increase in volume of work. This can become a valuable service bureau to the personal members.

The time has come when the Association must give special attention to the development of state and sectional hospital associations and make definite arrangements for affiliation with all these. In addition to the rendering of all assistance possible in the formation and development of these associations, there should be some plan of composite personal membership. It should be one of the duties of our executive secretary to assist in the development of these state associations and attend their meetings. After the national association shows some interest in and is of some value to the state associations, there will be no difficulty in arranging with each a composite personal membership, so that all who are personal members of the state associations become automatically personal members of the national association. Such plans have been in successful operation for some years in the medical and other associations providing a large continuous membership, and this plan will do the same for the American Hospital Association. A little study of our personal membership lists brings out pointedly the fact that our list may be divided into two classes: first, a limited number of old members who are permanent and who usually attend the meetings wherever held, and, second, a larger list, which is constantly changing. These join the year the meeting is held in their locality but soon drop out. This in a national organization can be nothing but a serious weakness. Personal memberships combined with memberships in the state and sectional associations will correct this.

Today it is quite obvious that the health officer, the medical college, the nurse, the hospital, the medical social worker, state industrial or other health insurance, many forms of private philanthropy and many other institutions and persons are all working with a common purpose for a common end. We now realize, however, that each has gone his or her way, meeting the problems immediately before them as best they could by their own efforts and through their own organizations without being able to bring routinely and promptly into action the other kinds of work carried on for just the same purpose and for the moment more effective and fitting. Sociologists and others have long recognized much of that which is now under discussion. The new thought is merely a general determination to accomplish a coordination, a betterment, and a general belief that something is now going to be done and that lines formerly considered as permanently established will be re-drawn. The health program of this country will not merely be amended, it will be entirely rewritten and in the near future. The common problem is to provide better health for all the people and to reduce the number of unnecessary and untimely deaths. We, as hospitals, are vitally interested in every phase of the general health program which is now developing, because the work of hospitals must be funda-

mentally affected by it. The hospitals of Ohio learned a severe, though much-needed lesson, through the enactment of Ohio industrial insurance laws. The hospitals gave no attention to these while the laws were under discussion and amendable. There is nothing to do now but to put up with their unsatisfactory and unjust provisions. At the present time changes in public health laws and programs are now under active discussion in every state. Is the voice of hospitals heard in these discussions? Is the viewpoint of hospitals presented? Are laws being drawn with consideration either of hospital conditions now existing or of hospital conditions and standards which should be required and established? In this matter the Association simply shares the responsibility with its individual members who are on the ground in every state. But is the Association doing all it can and should do to emphasize this and to encourage our individual members to feel a responsibility for their own states and localities, a responsibility to know the detail of the local health programs and policies and the relation of the hospitals thereto? Although the Association must depend in part upon the individual members for information as to proposed health laws or programs unwise and not well thought out from the hospital viewpoint, yet it is clearly the duty of the Association whenever such circumstance is reported, first, to have an influence and, second, to use it promptly and positively to straighten out these unwise laws and programs. During the past year eight states had commissions studying social health insurance. In carrying out any health insurance laws hospitals are necessarily an important factor, but in how many of these eight commissions was there adequate consideration given to this fact? I must answer —in none, although I was a member of one of the commissions. It is high time that hospitals as medical institutions acquire a definite policy and position in the work to be carried on by all forms of health insurance. To formulate this is indeed a task, but the American Hospital Association is the logical body to undertake this task. The Association needs among others a service bureau on legislation.

The meeting of the American Hospital Conference this week in conjunction with our Association will emphasize to you the present determination to make a beginning at once on the problem which has come to be called "hospital standardization." In the discussion at the meeting of the Council of Medical Education in Chicago March 3 of this year, it developed that there was among the delegates present and representing all forms of medical educational work, a common conviction that the working out of minimum acceptable hospital standards, as well as the development of hospital ideals, was a problem pressing itself before others. From this discussion came a resolution, requesting the American Medical Association to call a conference in Chicago of representatives from the principal recognized functions of hospital work to discuss this matter. This meeting was held April 21. The conclusions of this conference were—first, that the group of problems, commonly referred to as "hospital standardization" should be given immediate consideration. It was also recognized that the modern hospital is a decidedly complex institution, existing to render a broad but definite service to society and with many interests involved. The institution and the idea of service must take precedence over the interest of any groups of individuals. Real contributions to this service come from many sources. Some contribute personal service, as the medical profession, the nursing profession, trustees, social workers, executives and helpers of many kinds; others contribute financial support, others moral support and interest, and often this is the most valuable contribution a hospital can receive. There is a third class of contribution to service and the successful work of hospitals as a whole, more ethical and intangible, but first in power and importance. Of such there are three general classes with various subdivisions—first, medical education, second, nursing education, and third, philanthropy. These contribute indirectly but powerfully by furnishing strong incentives to personal effort and to continued and correlated action and also incentives to cooperation in work and to the development and material support of the institution. The institution is the power to do, created by the blending of all these contributory services and the material support. Every department of the hospital affects the results from the work of every other department. It is impossible to have in the same hospital good medical work and poor x-ray or laboratory work. It is impossible to have good surgery and poor nursing. It is impossible to have good nursing with poor professional work. A part can never standardize or disproportionately elevate the whole. No one of various hospital activities can control the development of the others or greatly advance any of them other than itself under any conditions, but can readily depreciate them all through its own defects. The elevation of hospital ideals and minimum standards must be a general development and the participation of each and every function must be whole-hearted and enthusiastic. For these reasons it was recognized that any movement along any phase of hospital standardi-

zation must be general in its makeup in order to succeed.

It was also decided that hospital administrators, notwithstanding the fact that they were responsible for all the activities of the institution, represented in thought and viewpoint too much a single side of the institution to accomplish or control the accomplishment of the general result desired. It was therefore the unanimous decision that a composite group organized on democratic principles should be created to take up this work.

In accordance with these principles the American Hospital Conference was formed to be composed at first of two representatives from each of twelve national organizations representing bodies of men and women directly participating in hospital work and development. Other organizations will undoubtedly be added. An executive council of three was also named to complete the organization of this conference and prepare program for its first meeting, which is to be held in conjunction with this meeting of the American Hospital Association.

In the past, hospital standardization may have seemed to some of you a term of the future and something that did not require your immediate thought and attention, but at the present time this cannot be true. You and your institution will be standardized with the rest for there now seems sufficient public opinion accumulating to make effective and rigid the accepted decisions, minimum standards and ideals.

HOW TO INSURE A SAFE MILK SUPPLY IN THE HOSPITAL*

Eliminating the Spread of Infection Through the Milk Supply an Item of Utmost Importance—A Process for Insuring Safety in Handling—Proper Equipment for Satisfactory Milk Room

By JOSEPH B. HOWLAND, M.D., Superintendent Peter Bent Brigham Hospital, Boston

THE importance of having a safe milk supply for our patients and hospital family can not be overestimated, and, in my opinion, it is the duty of every hospital superintendent to see that only safe milk is distributed for drinking purposes to all under his charge. The knowledge that I have attempted to eliminate the possibility of the spread of infection through the hospital milk supply has been a source of much satisfaction to me. It is common knowledge that infected milk may cause serious epidemics with loss of life. Dr. M. J. Rosenau gives the following list of epidemics which were definitely traced to milk in Boston during a period of five years.

1907	Diphtheria	72 cases
1907	Scarlet fever	717 cases
1908	Typhoid fever	400 cases
1910	Scarlet fever	842 cases
1911	Septic sore throat....	2064 cases
	Total	4095 cases

If we do not take every precaution to make sure that safe milk is used we must be prepared to accept responsibility for the results. If we are fortunate enough to have no lives lost by infected milk, we may still be responsible for serious economic loss. Our patients' stay in the hospital may be prolonged through the complication of a sore throat; our pupil nurses may through sickness lose time which they will have to make up before graduation; departments may be crippled through loss of employees' services; or we may have our house staff as patients instead of part of our working force. It is plain that such occurrences represent an expenditure of money to the hospital which we should prevent.

I have seen all of this happen, and I have no doubt many of you have, too. It therefore has seemed worth while to describe a practical method of handling our milk supply, and I hope that, in a discussion of the subject, others may tell us of how they have solved the problem.

It is not my intention to discuss at length the merits of using a raw milk as compared with a pasteurized milk, because I do not think there is room for discussion so far as our problem is concerned in supplying milk to older children and adults. The subject of a milk supply for babies is a special one for pediatritians.

It is generally accepted that heating milk from 145° F. to 150° F. for thirty minutes will kill the bacteria of tuberculosis, typhoid fever, scarlet fever, diphtheria, and many other pathogenic bacteria. Milk thus treated is not changed in taste, or is changed so little that few can tell that it is pasteurized. The ideal pasteurized milk is one which, after the pasteurizing process has been completed, is at once sealed, without human contact, in small units. For the smaller hospitals, delivery of pasteurized milk in bottles is the best solution of the problem. For large consumers

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this is too expensive a method of buying milk, and these suggestions are intended for larger users.

Assuming that we purchase our milk from a reliable source, we have through pasteurization eliminated infection from the cows themselves and from the milkers. If the milk jugs are sealed, there is no chance for infection in transportation. We have, then, a milk delivered to our door which is safe to use. It becomes our duty to see that it is handled by as few people as possible—preferably one—and that the milk-handlers are not a source of infection. If the milk is sent to the kitchen and from there is served to the wards and serving rooms by the kitchen man or maid who may best be spared at a particular time, we run considerable risk of infecting our milk, with little or no knowledge of the possible source.

I would have the milk, on arrival, go directly to a milk room and have one person only responsible for its care until it is placed in small cans or bottles for distribution. It does not cost much to make a satisfactory milk room, and the equipment, also, is not very expensive. The room, if of brick, painted a light color, can easily be kept clean by hosing down with water. The floor may be of cement or asphalt, graded to a drain. If there is another story underneath, waterproofing must, of course, be used in laying the floors. The equipment suggested is as follows: A receiving and mixing tank of copper, tinned or agate lined. This should have a sloping bottom with an easily cleaned draw-off cock which serves as a means of filling bottles and cans, and as a drain for cleaning. If the milk is to be bottled, a tank equipped with automatic bottle fillers may be purchased. I would recommend straining the milk as it is poured into the tank.

A washing sink with two compartments is required—one for the soapy water and one for rinsing. These trays or sinks may be purchased from dairy supply houses. A steam or water turbine for operating the bottle and can cleaning brushes can be bought ready to attach to the sink.

If the milk is to be distributed in bottles, it will be well to have, also, an attachment for rinsing and sterilizing them in crate lots. A suitable device for sterilizing the cans may be made by any hospital steamfitter or plumber by running a horizontal steam pipe a few inches about the back part of the trays with upright branch pipes 6 or 8 inches apart. These upright pipes are capped and have several small perforations to allow the escape of steam for sterilizing the cans. As they are washed, the cans are inverted over the pipes and the steam turned on for a few minutes.

A rack made of galvanized pipe with galvanized strap iron shelves is required to receive the sterilized cans. The cans are, of course, not dried inside with towels but inverted on the racks, drained, and left end down until needed.

An attachment on the wall is also needed, which consists of a cold water pipe, a hot water pipe, and a steam pipe, each with its own valve and connected to a common outlet, with a steam hose attached. With this hose cold water, hot water, and steam for cleaning the room and sterilizing the milk tank are obtainable.

In many hospitals, I presume the milk cans and bottles are washed in the ward kitchens or serving rooms. In my experience this is not satisfactory; hence, the suggestion of having all can and bottle washing done in the central milk room. Ward maids should simply rinse cans and bottles in cold water. While theoretically we need only sterilize the utensils in the milk room, I prefer to have complete washing equipment in one place and keep only one person trained in the proper method of washing milk cans. Thus we shall be sure of sweet, well-kept milk cans at all times.

I have talked about using milk cans rather than bottles because it seems to me that cans are a more practical means of transporting milk in the hospital. Bottles are expensive, easily broken in transportation, and most ward refrigerators are not large enough to take the number of one-quart or two-quart bottles needed for the daily supply of an average sized ward. For private ward service one-half pint bottles opened at the bedside may well be used.

For the serving rooms connected with our dining rooms for doctors, nurses, and employees, it seems to me well not to send large cans, such as are ordinarily used. These cans have such a large top opening that it is easy to fill tumblers for table use from a ladle or by pouring. It is thus too easy for some careless person in the serving room to drink from the ladle, and possibly infect the milk. A good solution of the problem is to have your tinsmith make a can of just the right size to supply milk for the meal with an inside bottom sloped to a sanitary faucet and have the top too small to allow the use of a dipper, or have the cover locked on. Then the milk may be drawn off only by a faucet.

So far I have spoken of means of sterilizing the cans and of having the handling of the milk done by one man. It is, of course, very important to know that the milk man is not a carrier of infection, and I do not believe we can trust the average employee to report of his own accord if he is sick, before he may do damage. For this reason I would oblige him to report to some physician in the hospital once every twenty-four hours, pref-

erably before he begins to put up the milk for the day. His throat should be looked at to be sure that he may not be coming down with an infectious disease and his hands examined to make certain he has no septic abrasions. I have found it most convenient to send the milk man to the bacteriological laboratory for his examination. If there is the least suspicion of sickness, a culture is taken and the man is not allowed in the milk room. You may ask why not have the milk pasteurizing done at the hospital. This, I think, is much the better way if you can afford to install and operate the necessary apparatus. It is not an inexpensive process and, if done at all, must be carefully attended to in every detail, or more harm than good is likely to result.

There is another phase of the milk problem of which I wish to speak. We all know that milk is expensive and should not be wasted. I have not found that the average head nurse, who too frequently leaves before she becomes entirely familiar with her duties, knows just how much milk is needed for her ward. If she is allowed to use her own judgment she will order too much or too little, in the latter case necessitating some one's making an extra trip to the kitchen or store room for a supplementary supply. For these reasons it seems to me a better way to determine a per capita allowance of milk for each class of patients. For medical wards a liberal allowance is necessary; the supply for sicker surgical and the children's wards should not be stinted; but for convalescent surgical patients little milk is required.

If the head nurse sends a daily requisition for milk, stating the number of patients in her ward, it is a simple matter to make out a sheet for the milkman so that he can fill cans for the day's supply. As the can is filled a tag designating the ward to which it is to go is attached.

It seems to me better to send the milk to the wards three times a day with the meals rather than once, for in this way the supply is more apt to hold out, and only a small can has to be handled in the ward at one time.

Cream is handled in the milk room just as the milk is, per capita allowances being made for the wards. It is mixed, canned, and delivered in the same manner and at the same time as the milk.

HOSPITALS OF THE OLD WORLD AND THE NEW—A COMPARISON

Continental Conception of Hospital Vastly Different From Ours—Buildings of Average European Hospital Unsuited for Hospital Purposes—Lack of Nursing Technique Hinders Modern Development

By MARGARET J. ROBINSON, R.N., Field Editor, The Modern Hospital, Chicago

WHILE studying the gradual growth and standardization of hospitals in our United States, it might be interesting to compare our hospitals as they stand today with those of another and much older country—one which has settled and accepted standards of caring for the sick. We might stand off, as it were, look at ourselves in perspective, and give ourselves credit

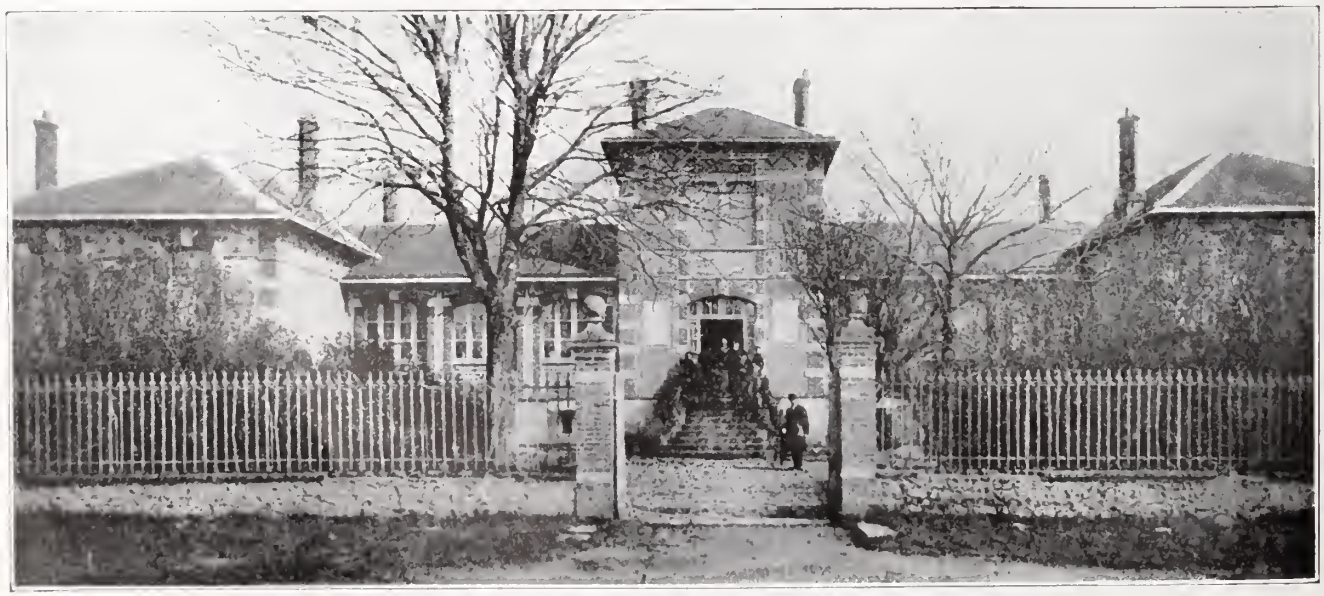

Fig. 1. The type used as a model for the Texier Gallas community hospitals.

Fig. 2. The general hospital of the Cathedral City of Chartres.

for what we have accomplished, in spite of our faults, mistakes, and things still left undone.

I recently had an opportunity to visit a large number of French hospitals—hospitals which can fairly be considered average types of hospitalization in that country. Although there are distinct examples here and there of fine institutions in the large cities, conspicuous as workshops for men of splendid minds in medicine and surgery, which are doing scientific work along special lines, the type of hospital I use for description in this article represents the French hospital as it is found in an average community, accomplishing an average hospital standard of work.

Hospital standards in France may be considered fairly typical of hospital standards in other Latin countries—typical also in many ways of the standards in other European countries, and perhaps, too, of standards of nursing care of the sick among other nations outside of the English-speaking countries, Great Britain, her colonies, and the United States. It seems that the Anglo-Saxons are unique, so far, in their development of nursing as a profession. We have come to regard our system as an accepted thing, and never realize how empty and incomplete a hospital can be without trained and educated women nurses, until we see hospital after hospital still bound down by the traditional methods in vogue before nursing became a profession of its own. More than ever, one becomes convinced that the medical profession alone cannot make hospitals, and that in its progress it must march beside the women of the nursing forces.

After visiting French hospitals, I saw several hospitals in England of the type which has developed gradually from very early beginnings and which shows quite clearly English standards and the growth of the modern hospital in Great Britain.

British medical and nursing education seems to be moving in much the same direction as ours. Their hospitals are constructed and equipped as we construct and equip ours, and they are staffed and administered much in the same way. Their medical men think and work as ours do, and their nurses, although they have not yet reached the place they deserve in the making of their own standards, are a splendid body of women doing a large share in the hospital standardization of Great Britain. The English hospitals do the same study and actual relief in their dispensaries, outpatient departments, and social service work. In fact, along all the lines of hospital growth, they do things in practically the same way as we do, so much so that one wonders just how many of the good things in hospitals we originated, and how many we borrowed from them.

It is true that the British hospitals for the most part are still places for those who can pay little or nothing for their own maintenance, but that, too, is gradually changing, and it will not be long before their hospitals will be used to reconstruct the titled gentleman and his family, as well as other prosperous individuals who now go either to the private nursing home or are cared for within their own walls. We may assume that this is the only marked difference between the British and the American hospital and that this difference is passing. Essentially, our hospitals seek the same standards of efficiency and are striving in the same direction.

Of the hospitals in the Teutonic countries, I know little from personal knowledge. It is generally believed that they are great workshops and schools for scientific research and medical edu-

cation. One reads and hears that they are vastly better built, equipped, and more efficiently managed than those in the Latin countries, but as yet no one has ventured to say that their system of actual nursing care is so conspicuously good that we should imitate it.

Fig. 3. In this quaint French town St. Vincent de Paul himself established a nursing sisterhood in the hospital.

German and Austrian, Italian and French scientists have done pioneer work in medicine and surgery which we can follow only as humble students. But have the hospitals of Germany, Austria, Italy, and France proved themselves able to follow up these great things with that type of assistance and care of the sick which is destined to bring the best results from the knowledge gained?

The nursing sisterhoods in Europe gave care to the sick, as best they could, long before the United States existed in the thought of men. The sisters of St. Vincent de Paul established hospitals in France several centuries ago and did social service among the poor of Paris, but nursing as a profession does not exist on the Continent today. If illness comes to a family of wealth and position, it is the English nurse who is sent for post-haste.

I claim no right or knowledge to make comparisons between hospitals because of their special brand of nursing technique or their lack of it. My point of view is gained only from impressions of things seen through a nurse's eyes, but, it seems to me that, where nursing technique is practically non-existent in any country, the modern hospital cannot develop.

When one crosses the channel from Southampton to Le Havre to enter France, he seems to be in another world, as far as hospitals are concerned. The hospital idea changes from Anglo-Saxon to Latin, and the hospital atmosphere, too —literally, as well as figuratively. One is confronted by traditions and traditional methods of administering hospitals and caring for the sick that British and American hospitals have long ago thrown into discard.

On the other hand, our French co-workers in the hospital, the *médecin chef* and the sister or *infirmière*, look upon our methods of medical treatment and nursing technique with the critical eye of an older civilization—a civilization which they firmly believe to be the most advanced type existing. Moreover, they do not care to know much about what the young, pretentious countries are doing about hospitals anyway and rather object to any exchange of ideas on such matters.

We view with horror and a certain amount of nausea, an unwashed pneumonia patient, struggling for breath in a room tightly closed to all

Fig. 4. A school-house in Normandy now used as a hospital.

ventilation, stripped to the waist line and holding in his trembling hand a candle which the doctor or nurse uses to light the alcohol in seventeen to twenty glass cups to place on his chest.

We are not alone, however, in our distress while watching someone's else treatment of things. The *médecin chefs* and *infirmières* breathe prayers when they see us wash our patients all over or open the windows on them. They are sure that our patients who die, do so because they have had no *ventouses* or huge epicérasties of camphor and oil, or because they have been placed in a *courant d' air*, which at any and all times is dangerous to life and limb. Nor is this point of view unique to France. Other Latin countries hold it.

In a great part of Europe, class distinction is still strong, both in republic and monarchy. Hospitals are places for a class who cannot pay for their care elsewhere—public charges, so to speak, who are not considered as individuals in the civic responsibility, although their care may be deemed necessary for the general public good.

The average Continental mind thinks of a hospital as a place for the orphaned, the old, and poor, the demented, the repulsive, and the acutely ill whose family either cannot or will not care for them at home.

In France there are *hôpitaux* (hospitals), and *hospices* (or *asiles*), which correspond in a way to our country poor house, *orphelinates* (orphan asylums), and the *asiles de vieillards*, or old people's homes. In most instances, however, there seems to be no marked dividing line between the various types. The general hospitals frequently appear to be old people's homes and orphanages with attached farms, which have occasional spots for the care of acute medical and surgical diseases. The *asiles de vieillards* care also for the old who are acutely ill, the demented, and the tuberculosis; while the community hospital cares for everything.

Many of these average hospitals are of very old foundation, and their buildings are usually unsuited for hospital purposes. In many instances, they are ancient convents or less ancient school houses of solid and beautiful stone con-

Fig. 5. The hospital in Nogent-le-Rotrou established by St. Vincent de Paul.

struction, sadly lacking in modern conveniences, light and air supply. Even when constructed for hospital purposes, the buildings vary little from the school or convent type. They are usually, to all appearances, clean; but the almost total absence of ventilation and primary nursing technique in the care of the patients makes the atmosphere of their wards unbearable to one not used to it, and suggests the advisability of a gas mask.

In that department of France with whose hospitals I am best acquainted perhaps the nearest approach to the small community hospital are the hospitals of the Fondation Texier Gallas. These are seven in number in as many cantons of the department. They are all under an endowed organization, and average about ten to twelve beds in capacity. A man and woman, husband and wife, known as guardians, have charge of each hospital. They do the housework, the gardening, and care for the patients. A physician of the town, appointed by the commission of the Foundation with the approval of the mayor, visits the hospital when called in case of the serious condition of a patient.

All hospital administration is usually in some way under the supervision of the civil authorities of the *département*, *arrondissement*, or the canton itself. This is true even when there is a definite foundation or endowment. The nurses and sisters are employed by the civil administration also, as, under the present laws of France, neither the church nor the sisters may control institutions or property.

The medical service of these hospitals generally consists of one or two general practitioners appointed by the civil administration. The nursing care of the patients is usually given by the sisters of the various orders—women of the best type of French womanhood and of the most devoted spirit, but, unfortunately, not as yet, fortunate enough to have had definite training in the nursing technique used by the orders of nursing sisters in America.

Where the nursing sisters do not care for the patients, *infirmières* are employed, and, as the Latin countries have not yet adopted the system of nurses used in Great Britain and America, and as women of good family and good repute do not as a rule enter the nursing profession, few of

Fig. 6. The most precious possession of the Hotel Dieu at Nogent-le-Rotrou: The tomb of the Duc and Duchesse Sully in its garden.

these *infirmières* are much above the servant type.

The business management of the larger hos-

pitals of the chief *arrondissement* cities is in the hands of an executive director who represents the civil administration. The financial condition of the hospitals is almost invariably good, generally showing some amount on the profit side at the end of the year. The average per capita cost as given in the business offices is still remarkably low, although much higher now than it was before the war. Several hospitals gave an average total per capita cost as low as three francs, about 50 cents at the present value of the franc, and several *asiles* which had more old people and orphans than really sick patients gave a daily estimate as low as 1 franc, 75 centimes, or about 30 cents of our money. In each case these prices were said to be about twice what they were before the war.

French military hospitals can be judged only with kindness and tolerance when one considers what suffering France endured for more than four years, and when one realizes that she was almost bankrupt of the necessary funds, men, and material to maintain a proper hospital organization. But there is no evidence to show that a much higher standard of hospital care existed before the war began. The government allows only from 2 francs 40 centimes to 3 francs per day for a soldier's care, which, while a meager allotment, is more than was considered necessary for the upkeep of a general hospital patient in prewar days.

The existence of this low rate of per capita cost is undoubtedly due to the fact that those things which would be considered necessities in the American or British scheme of hospitalization, either do not exist in these hospitals, or are considered in the light of luxuries from the Continental point of view. At no point in the making of the hospital, from its building and equipment down through administration, education, nursing care, and food supply, would the present standard of hospital care in France require the cost that the hospitals of Great Britain and America consider as fundamentally requisite.

As originally stated, I received these impressions while visiting a large number of French hospitals of various types—hospitals which are considered as average. And, although there are more distinct and better institutions in the larger centers, conspicuous for scientific work in special lines, the type of hospital I have described seems to represent fairly the hospital found in the average French community.

What the French hospitals lack in construction or efficiency they make up in other things worth while. The most gracious hospitality is always extended to the chance visitor. The name *Croix Rouge Américaine* brings welcome and friendliness from administrators, nurses, and patients, and many expressions of gratitude for the help extended by America.

The comfortable family atmosphere about the hospital wards we might well try to imitate. The patients themselves are really "patient." They have no bells to ring and demand little attention —perhaps because "he who expects little will not be disappointed."

The administration and the ménage of the French hospital is always thrifty. Waste of material is unknown. The keepers of money and books know every *sou* and *centime* that goes into the daily expense account and, at the end of the month or the year, every *sou* and *centime* is accounted for.

The *potager*, or vegetable garden, plays a large part in the economies of the hospital. Every hospital from the tiniest to the biggest has its own garden, and the only vegetables which go into the diet of the staff, patients, or employees are those that happen to be in the gardens or vegetable cellars. The dry storeroom of the American hospital with its shelves full of canned goods and other supplies exists not. The menus consist of soup made of cabbage, onions, or greens; meat from the local butcher or the farm owned by the hospital; salad or vegetables from the potager; the sour wine of the country; cheese and coffee, and always bread, huge loaves of bread. Surely not a menu to keep a dietitian worried about its variety!

Although our American hospitals as a whole leave much to be desired, and although it is indeed a far cry from our standardized hospitals to those which still bear resemblance to the primitive ones of the old world, I think we can surely pride ourselves on the hospitals of our country and on what they have accomplished in the time that has been given them.

Hotels for Babies

Hotels for babies is one of the newest schemes in Britain, the idea having originated as the result of the war. They are intended for the accommodation of young children in emergencies whose mothers find it impossible to keep them with them. One, with accommodations for children up to seven years of age, will receive only children from the professional class. The charge will be from one to two guineas a week, and they will be taken for a year or more. A Montessori teacher will look after their educational needs.

Another hotel will be for the children of the working classes. Fifteen can be cared for at a charge of 10 shillings a week. Their stay is limited to one month, the intention being to provide temporary accommodations for children whose mothers are ill, or who have died, and whose fathers can not care for them adequately. Miss Hodges, of the East London Hospital for Children, with the assistance of an expert staff, will be in charge.

THE QUESTION OF FIRE HAZARDS IN HOSPITALS*

Conditions of Great Potential Danger Remain Unimproved from Year to Year—Hazards Within Buildings and Surroundings—Methods of Improvement in Existing Non-Fireproof Hospitals—Fire Drills for Employees

By WILLIAM D. CROW, of Crow, Lewis & Wick, Architects, New York City

So much has been said about fire protection in hospitals that it would seem the subject surely must be talked out. All that controverts this conclusion is the fact that in so many hospitals conditions of great potential danger still exist, and are allowed to remain unimproved year after year, unrealized, apparently, by the good people who have the responsibility charged to them and for which they may some day be called to account. And these are good people, for hospital work interests only the people who are willing to give effort and money in the most necessary of charities. The inference must be that, if much has been said, much has been unheeded.

It may be that the hospital world has been lulled into a false sense of security by the often stated, but fallacious, theory that hospitals are peculiarly exempt from danger from fire, because of the fact that there is no time of the day or night when nurses are not on duty, ready to cope with any emergency. However much dependence is put upon this circumstance, it should not be overlooked that the nurses are not on duty in cellars, attics, boiler rooms, kitchens and many other parts of the hospital in which fire may originate and gain headway before it is discovered.

The records of the National Board of Fire Underwriters do not bear out the theory of immunity for hospitals, for in one year, 1917, claims were made for 387 fire losses in buildings of the hospital class. Statistics on fires collected by one of the prominent foundations show a weekly average of two fires in hospitals. The discrepancy in the figures perhaps may be accounted for by considering that small fires in hospitals are given as little publicity as possible.

Very fortunately, no great loss of life has occurred in hospital fires, but this will not prove to a thoughtful person that precautions should not be taken to prevent loss of life. Any small fire may be the beginning of a holocaust. Anyone who has watched a burning building knows the terrible rapidity with which fire spreads. A small blaze may in five minutes become an uncontrollable fire. Any one of the fires reported to the insurance companies might have been the precursor of a fire which would have furnished a stronger argument for fire protection than this paper may prove to be.

The hazards to a hospital building may be from without or may be within the building itself. Surrounding hazards will be perfectly obvious to anyone who looks for them. They are usually other buildings in dangerous proximity to the hospital and possibly of hazardous occupancy. The writer knows of one case in which a carriage painting shop is within a few feet of a frame hospital building. While this is an extreme case, a residence within twenty or thirty feet constitutues some hazard. The conditions in different cases vary and will have to be judged as they are found. If the hazard seems considerable it should be eliminated, if possible, or, if elimination is not possible, the hospital building should be protected against it.

In the case of a masonry building an exposed wall can be made satisfactorily safe if fire-resisting and self-closing windows are put in it. If the building is frame, some degree of resistance may be given to it by stucco on the exterior and by non-combustible roofing.

Hazards within the building are apt to be more numerous than those from without. Kitchens and laundries in the same building as patients probably constitute the most likely source of fire. Small blazes in such departments come within the knowledge of any hospital executive.

Electric wiring may also be a very considerable source of danger, especially if it is old and is of the kind known as "knob-and-tube work." This is the cheapest method of wiring and is used all too frequently by reason of its cheapness. The installation of electric light wiring is supervised by the insurance companies and, when new is safe; but, if low-grade wire has been used, or if the mechanics around the hospital have altered the wiring a few times, the condition of safety is not apt to remain.

Heating plants should not be in a building with patients and, more especially, high-pressure boilers should be outside the building. Low-pressure boilers are not particularly hazardous if properly taken care of, but the need for economy often compels the use of low-grade help for this purpose, and then the low pressure boilers may become a

*Read before the Twenty-first Annual Convention of the American Hospital Association, Cincinnati, Sept. 8-12, 1919.

danger. For example, if the water is allowed to get low, and the boiler overheats, the pipes for a considerable distance from the boiler will become hot enough to ignite combustible substances near them. There is the further danger of fire being communicated by the careless handling of hot ashes.

High-pressure boilers need the best of attention and sometimes let go in spite of it—or perhaps through only momentary laxness. In any case, they ought to be outside of the buildings so that patients will be in no possible danger from them.

Paints, paint stores, and inflammable liquids should be kept outside of the hospital. Painters know the danger of spontaneous combustion in paint rags, but, in spite of this, they are careless about them, and it is better to have this material kept where it can do no damage.

In the average hospital the lack of space for storage causes every available space to be filled up, often with highly combustible material. These storage spaces do not ordinarily receive frequent inspection, and a fire originating in them would gain headway before it was discovered. Storage rooms should be inspected carefully to make sure they are in no danger of fire from defective chimneys, bad wiring, or any other source.

Instances of what constitute hazards might be multiplied. Many will appear upon reflection, such as the use of out-of-the-way corners by men employees as smoking rooms, etc.

It is impossible to do more than generalize on the subject of remedies, as every hospital has its own problem, to be solved as the case demands. There are, however, some points which may be helpful and which may serve as points of departure in the consideration of any case.

The ideal hospital, of course, should be fireproof, and, in spite of the detractions which are sometimes heard, a modern fireproof building is really fireproof; that is, it is possible to construct a building in which any fire will with certainty be confined to the contents of the space within which the fire originates. This point is emphasized, for, while it is not strictly pertinent to this paper, it may be that in many cases a hospital could solve its question of fire protection better, and with not much more expense, by replacing dangerous old structures with safe new ones, than by spending a great deal on an unsafe old building and then still having it far from the ideal in respect to safety. Only if the patients can be all on the ground floor where they can be evacuated quickly is a non-fireproof hospital justifiable.

This paper has for its object particularly the improvement of conditions in existing hospitals, many of which are entirely frame. Others are brick, but have wood-framed floors and stud partitions, which make them hardly more safe than the frame buildings.

The problem which confronts the hospital staff when a fire occurs is to move the patients quickly to a safe place. Do not overlook the word "quickly," for the time may be ten minutes or less. It can be taken for granted that out-of-doors is the safest place to take the patients, but, with the staff ordinarily available, and particularly at night, it is not probable in many hospitals that all patients could be taken out of the building in safety if the fire progressed rapidly.

This being so, it is advisable to afford places of temporary safety to which patients can be taken quickly, by building fire walls which will separate the building from cellar to roof into two or more sections. Any one of these sections should be large enough to contain the patients from all of the sections on the floor, on mattresses, for bed patients will have to be handled on mattresses. Communication through the fire walls in each story should be by fire proof doors, preferably large single doors which will be held shut by their latches and equipped with three-point latches. In any case, they should not be double-acting doors which would be blown open by the strong draft created by a fire. Fire doors should be shut normally and be provided with springs or checks to keep them shut, for an open door is not a fire-stop.

In subdividing the building, every route through which fire could pass between the sections should, of course, be blocked, and elevator and dumbwaiter shafts should be made fireproof so that they can not communicate fire from floor to floor.

The subdivision of the building outlined would give only temporary safety, so that each section should have an adequate exit by means of which the removal of the patients from the building could be continued. In a hospital no stair should be non-fireproof and every stair should be in a thoroughly fireproof enclosure, no matter what the construction of the building may be. An enclosed stair prevents the spread of fire and, what is more, prevents the spread of smoke, which, in some fires, causes more loss of life than the fire does. An exit stair should have communication directly out of the building and should be planned with an easy rise and with sufficient width, especially at landings, to permit patients to be carried out on stretchers or mattresses.

Absolutely no dependence should be put upon the ordinary type of fire-escape, such as is usually required by city authorities. When these fire-

escapes are put on a building it is almost invariably necessary to run the stairs across windows, where fire soon renders them useless. It is conventional for building inspectors in most cities to require these fire-escapes, and the convention persists in spite of the repeated failure of the type to save life. But they have absolutely no value on a hospital building. One proof of this would be to try to take an empty carrying stretcher down one of these fire-escapes. This matter of fire-escapes is dwelt upon to what may seem to be a disproportionate length, because in many cases large dependence is being put upon fire-escapes as a means of exit in a crisis, and it is a very slender reed to lean upon.

If it is in any way possible, kitchens, laundries, heating plants, and any other department constituting any hazard, should be located outside of the hospital proper and be blocked off in such manner as to prevent the spread of fire to the hospital.

If the electric wiring is not positively known to be in absolutely safe condition, it should be inspected, even if the inspection involves considerable expense. If the inspection does not disclose a satisfactory condition new wiring should be put in. This wiring should be of good grade wire and should be installed in conduit. This is a remedial measure which should not be put off, for wiring extends all through the building, is hidden, and constitutes an insidious and constant source of danger if it is defective.

While structural remedies are likely in most cases to provide the best means of saving life, every hospital should have fire-fighting equipment to cope with a fire in its incipiency. With the early discovery of the fire and a certain amount of good fortune, most fires can be checked before they become serious, and it is important to provide all equipment needed for this purpose.

The most convenient form of extinguisher is the small hand, chemical extinguisher, of which there are many good makes, and these should be of sizes small enough to be easily handled by a nurse. As these extinguishers can put out only small fires, they should be plentifully distributed about the hospital, so that no time need be lost in getting one into action.

Where sufficient water pressure is available, standpipes and fire hose should be provided to use on fires which can not be checked by the extinguishers.

Automatic sprinkler systems are indubitably efficient in checking fires and, in many cases, can be used to advantage in parts of hospitals, especially in cellars, store rooms an dattics. The writer questions the advisability of putting sprinklers in patients' rooms or wards, as fires are not apt to originate in these rooms, and, in any case, the shock caused a patient by a shower of cold water might be a serious matter. Sprinkler systems require good care and can easily be made less efficient by lack of such care.

In buying any kind of fire apparatus or any building material supposed to be fireproof—doors and windows, for example—if the buyer insists upon having material and devices "underwriters labeled," it will be certain that they have had the searching examination of the Underwriters' Laboratory and are efficient.

Fire alarm systems should be installed with stations throughout the building, from any one of which an alarm can be sent in to the fire department and which will cause the alarm to be sent simultaneously to all portions of the hospital and to the nurses' home, helps' quarters, and every other place from which assistance can be had quickly.

The alarm bells in patients' corridors and wards should be low-toned and have some characteristic sound significant to the employees but not alarming to the patients.

Fire drills should be held frequently enough to familiarize employees with their fire stations and duties in case of fire so that there will be no confusion at the time of actual danger. It should be noted that fire drills can be conducted quietly enough to avoid alarming patients unnecessarily.

It is recommended that the authorities of hospitals concerning which there is any doubt respecting the degree of safety afforded patients, make an open-minded survey of the hospital, securing the best advice available, with a view to determining just how much hazard exists. Then, if the hazards seem to warrant improvement, the improvement should be made promptly. This is a work which should take precedence over an increase of the endowment fund, an extension of the hospital, a new ambulance, or any other cherished project.

While the limits of this paper preclude mention of more than a few hazards or remedies, it is hoped that it will impel hospital people to give serious consideration to the general subject and serve as an index to the line of thought to be followed. The writer will be pleased to furnish more specific data to anyone interested in the subject.

Community Singing a Valuable Assistant

Community singing is part of the life of every military hospital. Singing has been found especially helpful among the "psychopathic" patients whose minds have been affected by the war, or by wounds received in battle. Musical instruments have been provided by the Red Cross, and bands and orchestras have been formed in many hospitals.

A NOTABLE AND SPLENDID MEMORIAL HOSPITAL

Unusual Location and Excellent Construction Make The Blodgett Memorial Hospital, Grand Rapids, Mich., A Model Institution for the Treatment of the Sick—New Structure Embodies Most Modern Ideas Throughout

By CHRISTINE M. HENDRIE, R.N., Formerly Supervisor of Instruction, The Blodgett Memorial Hospital, Grand Rapids, Mich.

THE Blodgett Memorial Hospital of Grand Rapids, Mich., was built by John McNabb & Sons, of that city, the architects being York & Sawyer, of New York City. The hospital has a most unusual location, in that it is situated on a tract of twenty acres of high, rolling ground, overlooking beautiful little Fisk Lake, in the finest residential suburb of the city. By reason of its isolated site and elevated position, permanent light, fresh air, and a maximum degree of coolness during the summer months are assured. While located at some distance from the center of the city it is easily accessible by car line, and the beauty and privacy of the grounds and surroundings make it an ideal spot for the treatment and convalescence of patients.

Fig. 1. Blodgett Memorial Hospital—view from the northwest.

The gift of Mr. John Wood Blodgett as a tribute to the memory of his mother, Jane Wood Blodgett, this is indeed an ideal memorial hospital in point of construction, convenience, and refinement of detail. Here we have a fine example of Italian architecture—the frame of reinforced steel and concrete with walls of wire cut, rough texture, red brown brick, laid in Flemish bond with three-quarter inch recessed joints, with window and door sills of West Virginia "Kingwood" sandstone, and the roof of reddish tile with copper cornice.

Fig. 2. The doctors' entrance on the west.

The ceilings of the porch at the main entrance, and the porte cochere at the west entrance are of unglazed tile. The floors of the first floor loggias, and the pergola leading to the nurses' home are of English heather-brown quarry tile, all other loggia floors being of tile.

On entering the main door, at the north, one is attracted by the beautiful tones of the French Botticino marble wainscoting, and is impressed by the wonderful softness of the color scheme throughout, observed even to the very beds, which harmonize with the warm greyish buff of the walls.

Fig. 3. Looking east toward Fiske Lake from the fifth floor loggia.

The telephone switchboard and information

desk face the main entrance, and all telephonic service, general and house, is taken care of at this point. On either side of the entrance are waiting rooms, and directly opposite is the general office, with the superintendent's office on the left and the record room on the right. The first floor contains the superintendent's private suite, the interns' quarters, dining rooms for officers, nurses, and visitors, and the board of trustees' room, of

Fig. 4. The sterilizers in the operating-room suite.

extreme and elegant simplicity, perfect in every appointment.

On this floor, also, is found a most complete hydrotherapeutic department, equipped with the apparatus necessary to give massage, electric, Nauheim and Turkish baths, and all forms of treatment that come under the head of hydrotherapy. A few private rooms also connect with this department. All marble used here, and in all toilets, bath and service rooms, is English-veined Italian marble. Adjacent to the hydrotherapy department is a complete pharmacy. All tables in the pharmacy, laboratory, and service rooms are of Alberene stone. At the western door are a waiting room and examining room, where patients are received and examined before admittance to the wards.

The hospital has two elevators, provided with noiseless, safety-closing, fire-proof doors, which have been constructed with a view to carrying patients with the greatest degree of comfort and facility.

All bases, ceilings, and corners throughout are coved, and the plastering is flush with the steel

Fig. 5. One of the wards.

door frames, making an entire absence of joints and sharp corners. All service and utility rooms are on the north, allowing most rooms occupied by patients a southern exposure, and all rooms and wards a sun exposure at some time during the day.

Plumbing fixtures throughout are of solid white

Fig. 6. Pathological laboratory.

metal or brass, and all the hardware is of solid bronze. In all locker rooms, baths, etc., plate glass shelves over the lavatories are supported by brackets of diamond metal. Here, also, are sanitary white-enamel steel-framed mirrors. Indirect lighting is used everywhere, with side lights and reading lamps in addition.

The doors are heavy oak, plain surface on each face, with an inset stripe of black holly, stained a greenish grey which harmonizes with the color scheme observed throughout. All doors are wide enough to admit of the passage of ordinary hospital beds.

The furnishing of the building is a notable point—beautiful walnut furniture, especially designed for hospital use, with no dust-collecting

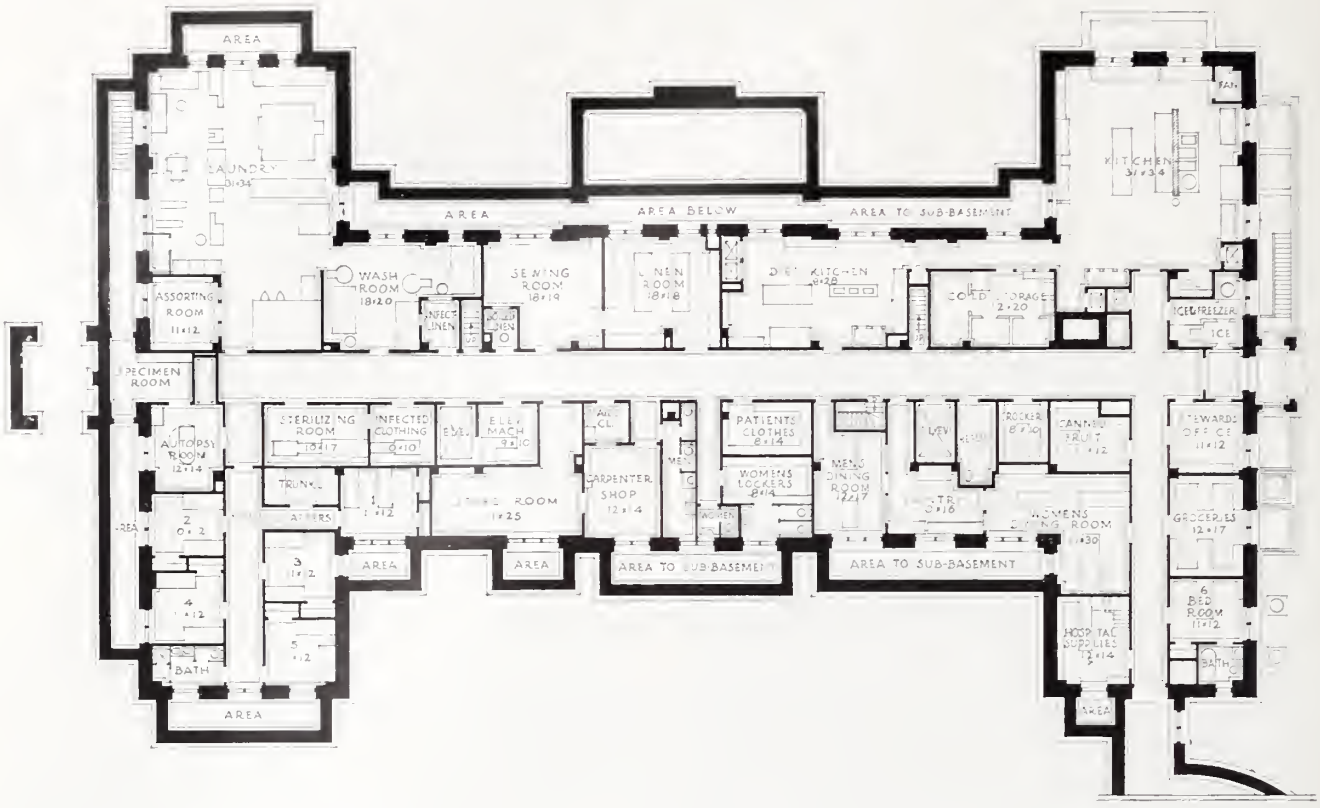

Fig. 7. Plan of basement, showing cold storage rooms accessible to both main kitchen and diet kitchen.

crevices; and all tables and dressers covered with chintz and plate glass. Oriental rugs throughout make the rooms and wards most attractive.

Each floor has a diet pantry, fitted with steam tables, where the food is sent from the central kitchen via electric dummies and served under the supervision of a diet nurse. Each floor also has a special "flower room," where all the care of flowers and vases is provided for. The first hall floor is of terazzo, with marble border. All others

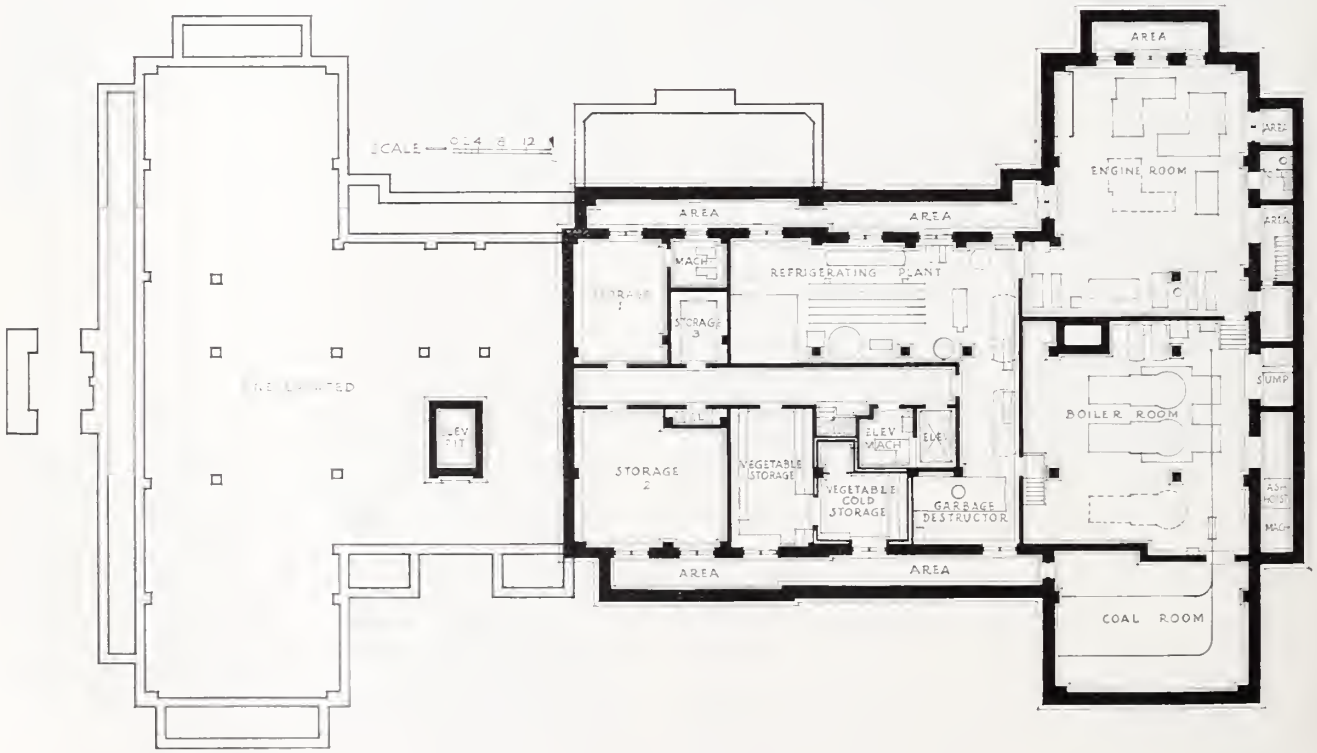

Fig. 8. Plan of sub-basement, with refrigeration and electric light plants.

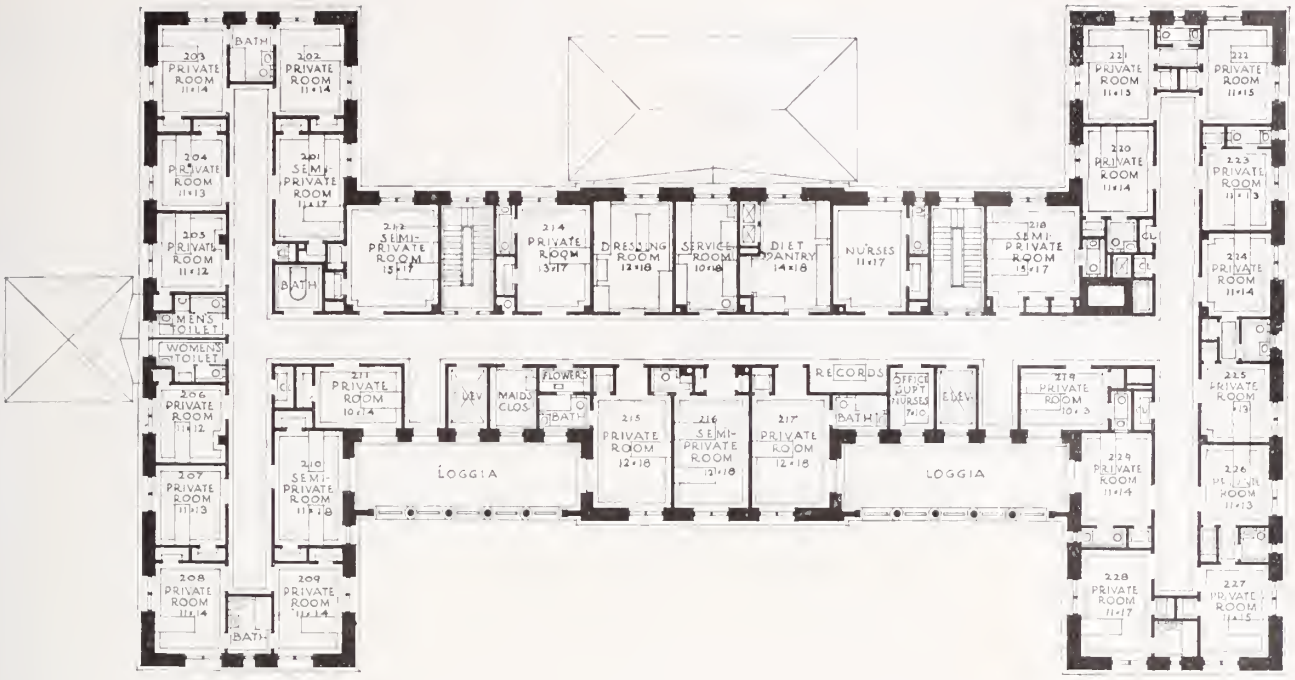

Fig. 9. Plan of second floor, given over to private and semi-private rooms.

have terazzo borders, the same as the rooms, with heavy brown battleship linoleum centers, laid to a brass ground. The ward linoleum is of dark green. All bathroom and operating room floors are of tile. An enamel steel-tube clothes-chute opens on each floor. A silent signal system is established for all rooms, wards and loggias, as well as for officers' call.

The second floor contains private and semi-private rooms, a number of which are connected with screened loggias or outside porches. The semi-private rooms, planned for two patients, have separate clothes-closets and signal systems for each patient. A number of private rooms connect with bathrooms, and some of them have a private bath.

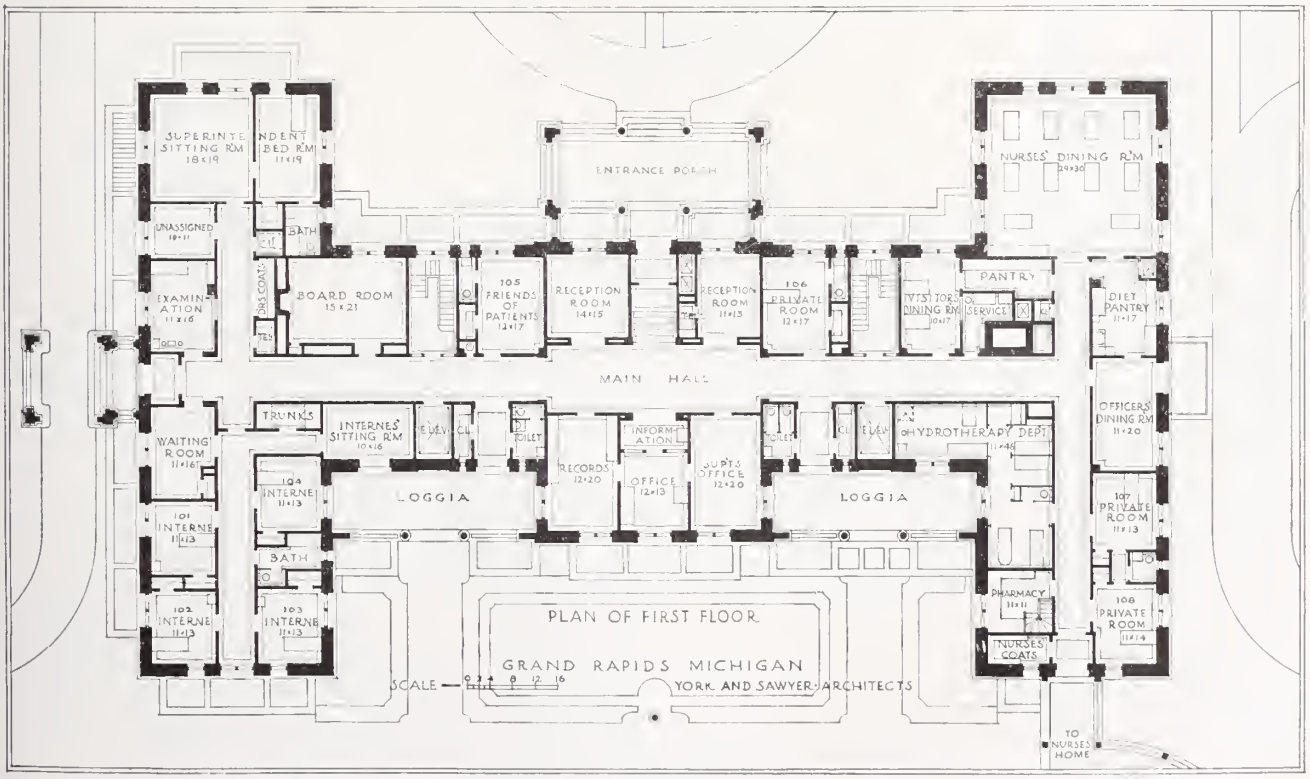

Fig. 10. Plan of first floor, which contains the various offices and interns' quarters.

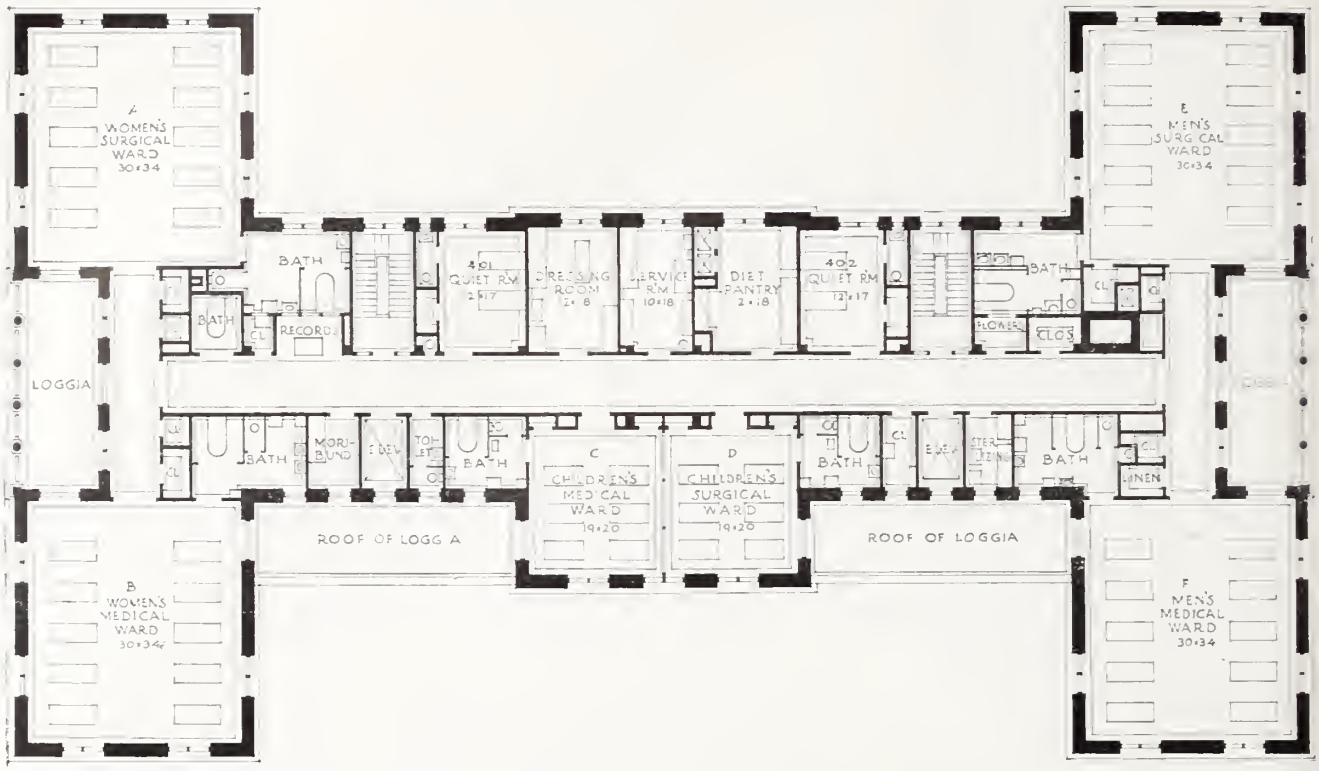

Fig. 11. Plan of fourth floor, devoted chiefly to six twelve-bed wards.

The third floor is the maternity department and contains private and semi-private rooms. This department is one of the most complete in the institution, and much thought has been taken to give to mother and child, irrespective of their financial circumstances, the most scientific care known to modern obstetrics. There are two sound-proof delivery rooms, each provided with entire equipment. Between the two are the sterilizing room and locker rooms for nurses and

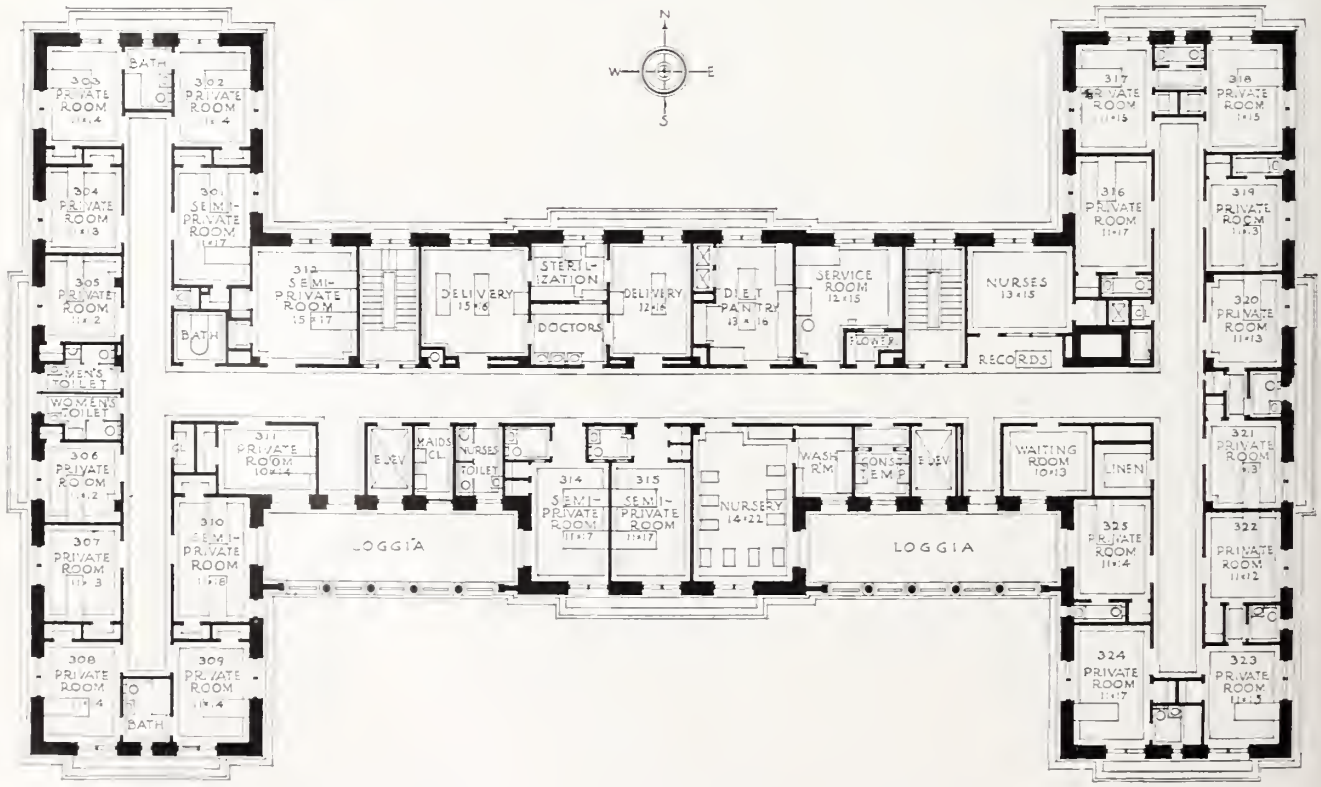

Fig. 12. Plan of third floor, the maternity department of the hospital.

doctors. Opposite the delivery rooms is a superheated or "constant temperature room," which is the latest evolutionary development of the baby incubator. The heating facilities of this room are so delicately adjusted that any desired temperature may be maintained without variation. One of the most attractive rooms on this floor is the "nursery," on the south side of the building, opening from which is a special room equipped for the proper bathing and dressing of the infants. In addition, the babies have their own screened loggia.

The fourth floor is chiefly devoted to six well lighted, well ventilated wards. The women's surgical and women's medical wards are at the west

Fig. 15. A laboratory view in the hospital.

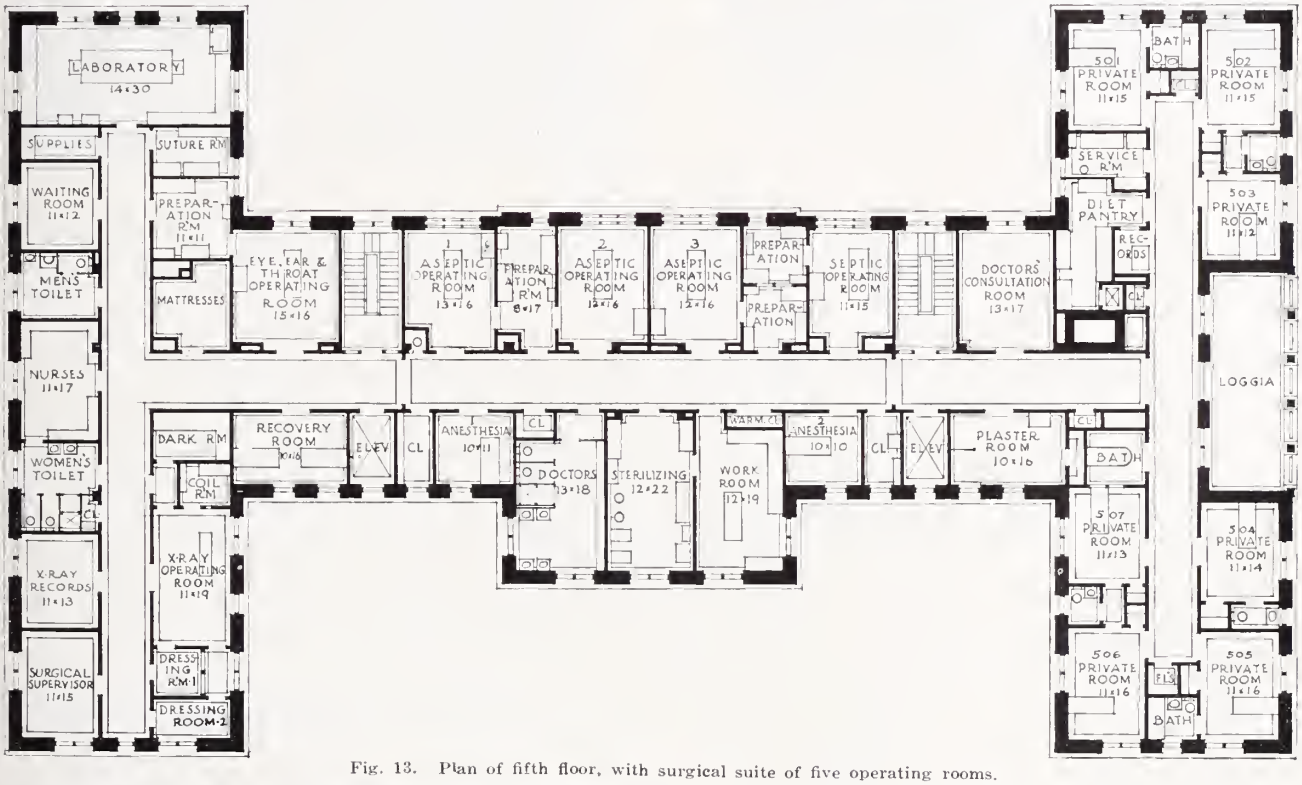

Fig. 13. Plan of fifth floor, with surgical suite of five operating rooms.

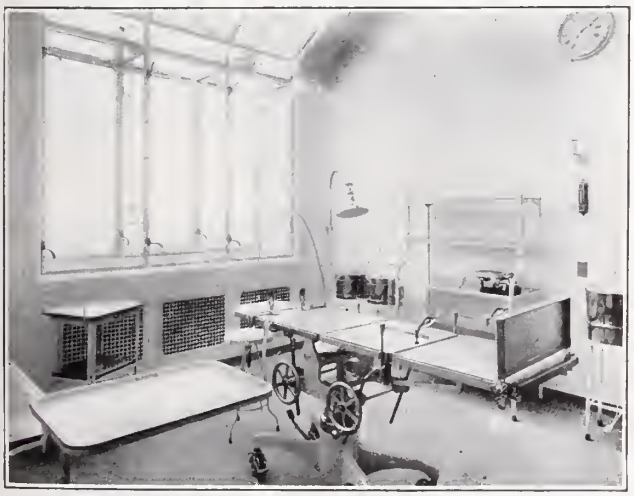

Fig. 14. Note the splendid light in this operating room.

end of the main corridor, while the corresponding wards for men are at the east end. Each ward accommodates twelve beds. The children's wards of six beds each are on the south side of the main corridor and are separated by a large plate glass partition, in order to enable one nurse to supervise both wards. Each ward has its own service room and each ward has access to at least one loggia, enabling patients to get into the fresh air and sunlight without the inconvenience of being moved from their beds. The dressing room and general service room are the same as on the private room floor. In addition, there is a sterilizing room for dishes, utensils, and specimen jars and bottles.

On the fifth floor is a perfectly equipped labora-

tory, adjacent to the surgical suite of five operating rooms with the necessary preparation rooms, anesthesia rooms, doctors' and nurses' locker rooms, with shower baths, etc., sterilizing room,

Fig. 16. One of the most cheerful corners of the hospital is devoted to the superintendent's sitting room.

nurses' work room, suture room, doctors' consultation room, surgical supervisor's office, and a waiting room for friends of patients. On the west corridor is the x-ray department. The equipment of the surgical and x-ray departments is of the latest and most approved type, and includes everything to make for the scientific success of these departments. The very latest improvements in lighting and heating are used, and the perfect equipment includes an electric heated solution warmer and a steam heated blanket warmer. On the same floor we find a wing of several private rooms given over to patients who especially require rest and quiet.

In the basement are the main kitchen and special diet kitchen, with a cold storage room accessible to both, where every possible practical arrangement and detail is adopted that would make for the proper care and service of food, including French ranges and broilers, steam jacketed copper kettles, and cereal cookers. In this department the floors are of the English heather-brown quarry tile, and the walls of a white special dull glaze tile. On this floor also are the steward's office, the drug store room, grocery store room, crockery room, help's dining rooms, sewing room, linen room, carpenter's shop, autopsy room, a large sterilizer built to take care of mattresses and the entire bedding, a completely equipped steam laundry, and the quarters for the male help.

In the sub-basement are located the boiler and engine rooms, the refrigeration plant, providing brine refrigeration to all cold storage, kitchen, and service room boxes, laboratory and drinking fountains. Here, too, is the electric light plant. In the sub-basement, also, ample storeroom accommodations and a special refrigerated room are provided.

Through the generosity of the donors, Mr. and Mrs. Blodgett, Grand Rapids has a hospital that,

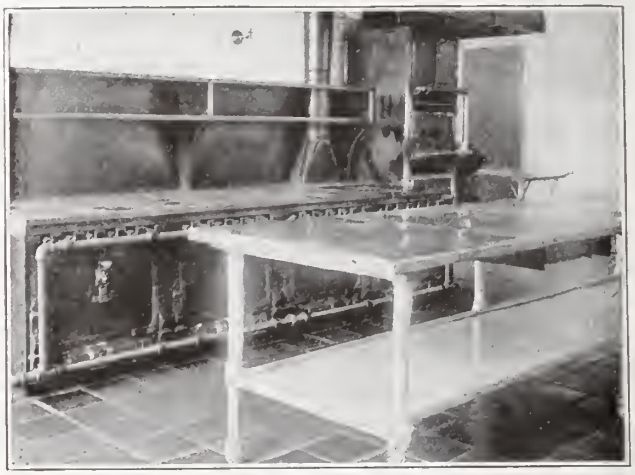

Fig. 17. The general kitchen.

in its entirety, is one of the most complete institutions of its size in the world.

How to Take a Shower in France

One of the most appreciated of the many treats the Red Cross gave the doughboys in France, was a bath. The boys of the Third Division were at one time five weeks in the trenches without changing their clothes. Imagine their thoughts after an exhilarating shower behind the lines, as well as being refitted with new clothes. The type of portable shower used was called the "eight-head shower" or field douche. It is a simple water tank with a fire box, which burns either wood or coal, a pipe line with eight sprays, and flooring under the sprays. It is easily adjusted, too. In a building, the water supply is connected with the water tank—and, "voila," the job is done.

In the field, the same arrangement was made, and as there was no water pressure, the water was poured into tanks with buckets. The apparatus is absolutely "fool proof," provided there is no water in the tank when the fire is lighted. During the Chateau Thierry drive, nine of these portable showers were set up, and in one week seven thousand men were brought back from the firing lines, bathed, reclothed, and sent back refreshed physically and mentally.

Wireless Canned Music

At the Walter Reed Hospital, Washington, D. C., the soldier patients are revelling in wireless canned rag time through the wireless music equipment installed by the American Red Cross. By simply hooking a metal clasp to the springs of his bed and putting a small receiver to his ear, a boy confined in bed may revel in jazz to his heart's content, without disturbing the buddy in the cot next to him whose nerves won't stand it. On the cord attached to the receiver is a small device for regulating the volume of sound. One boy wheeled himself out on the porch, and hooked the metal clasp on a wire spoke in the wheel of his chair. It worked just the same.

Fig. 1. Dancing flower fairies on the walls of the Du Bois ward who vie with sunbeams.

A HOSPITAL IN WHICH BEAUTY AND SANITATION PREVAIL

Tiny Ones at New York Nursery and Child's Hospital Surrounded by Atmosphere of Spring-Time Joyousness and Out of Doors—Harmonious Color Scheme Aid in Health-Giving

By MARY E. McCORMACK, Publicity Department, New York Nursery and Child's Hospital, New York City

SEVERAL years ago, in the course of an interview with a well-known Hindu lecturer and scholar, a prince of royal birth, who had been educated at Oxford, and who, with a view to bettering the conditions of his own people, was making a careful study of social customs in Europe and this country, the writer of this article was particularly impressed with his comments on our modern hospitals.

"Do not misunderstand me," he added, "it is not that I do not fully appreciate and admire the marvelous scientific work which your hospitals are doing—that I do not thoroughly understand the absolute necessity of having everything connected with them spotlessly clean and sanitary; but do you not think that at times in your striving for scientific perfection you lose sight of the human material with which you are dealing?

Fig. 2. Center of ward where smallest citizens receive special care.

Does the psychological value of brightness, and warmth, and color on the minds of your patients mean nothing to you? Is there any real reason, for example, why walls and furniture in soft blues and browns and rose cannot be made just as clean as white?"

There will be many without doubt to take issue with the Hindu scholar, but perhaps if we were perfectly honest with ourselves we would find that his objections are not wholly without foundation. The age-old tendency to confuse the relative importance of man and of the Sabbath that was instituted for man's comfort and sanctification still persists.

Possibly if we looked carefully into the matter we would discover that the dread of hospitals, which still persists in the mind of the average layman in spite of modern methods of education and publicity, is largely due to the prevalent tendency to discount "the human material with which we are dealing" in planning and managing our hospitals.

This tendency in a large institution where everything must be run strictly according to rule and regulation is very difficult to overcome, and it takes a great deal more than mere efficiency and executive ability to do it. It requires the wide, sympathetic imagination which recognizes in the recoil of sick minds and quivering nerves from the terrifying *whiteness* of the average hospital ward an element of genuine suffering. It requires also a persistent and painstaking attention to the many seemingly unimportant and in-

Fig. 3. Enjoying the privilege of a private bath.

finitesimal details which go toward making the sum of human happiness.

It is because those in charge have never allowed themselves to lose sight of the fact that their time and service are dedicated to the hap-

piness and well being of the women and children under their care, that the New York Nursery and Child's Hospital has come to be known in the last five years as the hospital with a soul—a title well earned by faithful service.

It would be impossible to exactly define the secret of the joyous, hopeful spirit which permeates the entire hospital. It is made up of a thousand and one little details which would require too much space to go into at the present writing. However, an important factor has been the determination of those in charge to make the place as homelike as possible, and to get away from the conventional institutionalism in planning the decorations for the rooms and wards. Softly tinted walls of blue or rose or green, gay cretonnes, sheer scrim curtains that are changed each time the windows are washed, sitting rooms with deep, low easy-chairs and softly shaded lights, all help to produce the homely air which makes the patients forget, in a measure, that they are in a hospital.

Above all others, little children are sensitive to environment, and it is on the seventh floor where the children's wards are located that the greatest efforts have been made to secure an atmosphere of beauty and happiness. It is only within the past few months that the hospital has been able to carry out to a satisfactory degree the ideas which it has long cherished on the arrangement and decoration for a beautiful children's ward more in keeping with the ideals of its management. This was made possible by the recent gift of an endowment for a new babies' ward made by Miss Helen R. DuBois and Miss Ethel DuBois in memory of their father, Dr. Matthew DuBois. Since the founding of the New York Nursery for the Children of Poor Women, by Mrs. Cornelius DuBois in 1854—the nucleus from which the New York Nursery and Child's Hospital has grown—the members of the DuBois family have taken a keen interest in the growth and development of the hospital, and this beautiful living memorial has been the outcome.

The old babies' ward facing west and south was used as a foundation for this DuBois Memorial and when the afternoon sunlight floods in through the many windows the place has all the beauty and joyousness of springtime and out of doors. The walls have been painted the delicate, new green of young apple leaves, while the furniture is tinted a blossom pink. Around the walls is a frieze of dancing flower fairies designed with exquisite grace and filled with the imaginative beauty of childhood by the hospital artist.

However, in spite of the beauty of the ward, no safeguards for the health and well being of the little people in it have been omitted. The larger cribs are each placed in a separate, glass-enclosed cubicle which cuts off not one bit of the air and sunlight, but which prevents any possibility of cross infection; and, in the pink-enameled, glass-topped table beside each little bed, are the individual toilet accessories—combs and brushes, wash basins, powder bottles, thermometers, etc. An individual enameled bathtub rests on the lower shelf of each little table.

The value of the glass-enclosed cubicles in the children's wards has been thoroughly demonstrated at the Nursery and Child's Hospital, and, since their introduction several years ago in St. Christopher's ward which is used for observation as well as for the care of very sick children, there has not been one single case of cross-infection or contagion.

In the special care of feeding cases, however, in which the pediatricians of this hospital are particularly interested, these physicians have felt that the problem of child care differs somewhat from that of the ordinary sick child and prefer, for this purpose, the open space in the center of the ward where these babies have the advantage of every possible bit of fresh air. For this reason the center of the ward has been left free and here in bassinets are a number of very tiny babies, "feeding cases" for the most part, all of whom have been under observation in St. Christopher's ward for a sufficient length of time to allow for the development of any possible complication. For these little folks special bathing cubicles equipped with little low tables and chairs, enameled tubs, clothes racks, baskets, etc., all in keeping with the general color scheme, have been arranged.

To insure the greatest possible amount of ventilation, the walls between this and the adjoining ward, which is used for the observation of well, boarding-out children pending their placement in foster homes, have been removed for a distance of about five feet from the ceiling thereby securing a continuous current of air from all sides and adding considerably to the comfort of the patients.

In connection with the attractive children's wards in this hospital, there is also a "sunshine ward" on the roof for children with pulmonary or tubercular tendencies and others particularly in need of an abundance of fresh air and sunlight. A sand box, a swing, and a number of toys are provided for convalescing children, and well children awaiting placement in boarding homes, spend their entire days there reaping the full benefit of the air which, owing to the height of the building, blows fresh and pure from across the river.

Fig. 1. The Neustadter Foundation.

THE NEUSTADTER FOUNDATION—A CONVALESCENT AND RECREATION HOME FOR WOMEN AND CHILDREN

A Convalescent Home Planned on Liberal Lines—Out-Door Space a Leading Feature—Buildings of This Class Not Numerous But Increasing

By YORK AND SAWYER, Architects, and S. S. GOLDWATER, M.D., Consultant

PUBLISHED descriptions of institutions for the care of the sick are now so numerous that one is tempted to apologize for adding to their number. Our excuse for presenting this description of the new home of the Neustadter Foundation at Yonkers, N. Y., is that accounts of buildings designed especially for convalescents are comparatively scarce.

The Neustadter Home will serve as a non-sectarian, convalescent and vacation home for about fifty-five women and children. It is a single building, having an extreme length of 175 feet and an extreme width of 100 feet. Construction was begun early in 1918 and completed July, 1919. The principal materials are brick, steel, and concrete; the roof is slate; the floors are terrazzo in the corridors, recreation, and dining rooms; tile in the kitchens, bathrooms, lavatories, and toilets; battleship linoleum in the wards; and cement in the basement corridor and store rooms. The home was erected during the war period at a cost of approximately 40 cents per cubic foot for the completed building, including excavations, laundry and kitchen equipment, plumbing and electrical fixtures, sterilizers, heating plant, and high-pressure boiler. Electricity is obtained from the local power company.

Out of the fifty-five patients for whom the home provides, thirty-two are accommodated in three wards of twelve, eight, and twelve beds, respectively. These wards are divided by low partitions and hanging curtains into individual cubicles, 6 feet 9 inches by 10 feet each; the cubicle partitions begin one foot from the floor and have a height of 7 feet. The ward arrangement is such that each cubicle is provided with its own window. With the exception of a few inmates for whom single rooms are provided, those who are not in the wards will occupy rooms having two beds each. As a rule, a two-bed room will be occupied by a mother and child.

In the planning of the home certain facts that are not generally understood became clear. Most hospital men would probably assume offhand that owing to the relatively simple character of convalescent work, the amount of construction per patient in a first class convalescent home must be notably less than the construction required for a small or moderate-sided general hospital. This assumption, it appears, does not hold if the convalescent home is planned upon liberal lines. A study of the accompanying plan will show that, compared with a hospital for the acutely sick, operating room space, space for nurses and for nursing work has been saved, but that the space provided for the use of patients outside of the wards is far greater than an ordinary hospital would require. This space includes a large central dining room, a commodious recreation room, and several occupation rooms of liberal size. In

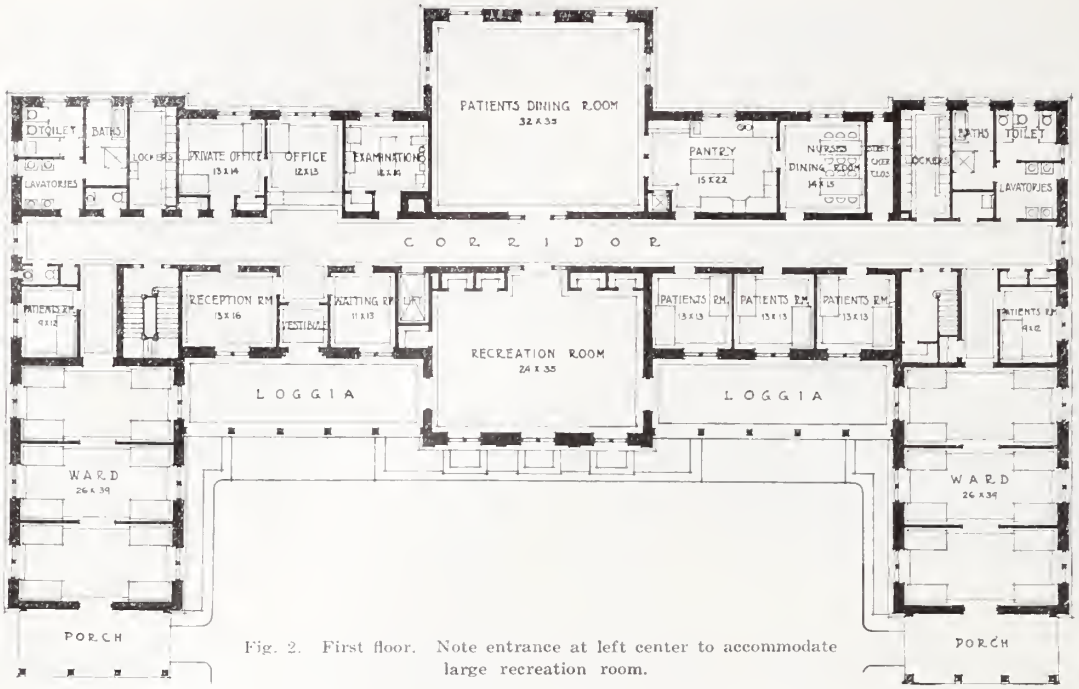

Fig. 2. First floor. Note entrance at left center to accommodate large recreation room.

addition, there is sufficient loggia and balcony space to accommodate all of the patients out of doors when desired. It is plain that these features will contribute distinctly to the comfort and welfare of the inmates in a home which is to be occupied throughout the year.

Reference to the plan of the first floor will show that the entrance is to the left of the center; this is because it was thought desirable to retain the best part of the south front for the large recreation room. The wards, at either end of the building, have doors opening directly on to the adjoining porches. Connected with each ward are lavatories, toilets, and baths, each in a separate compartment with its own window for ventilation. Adjoining each ward is a locker room containing individual metal lockers. A combined dressing table and chest of drawers is to be placed in each cubicle.

Special features of the second floor plan are the occupation rooms; two "unassigned rooms" reserved for special therapy; a private corridor

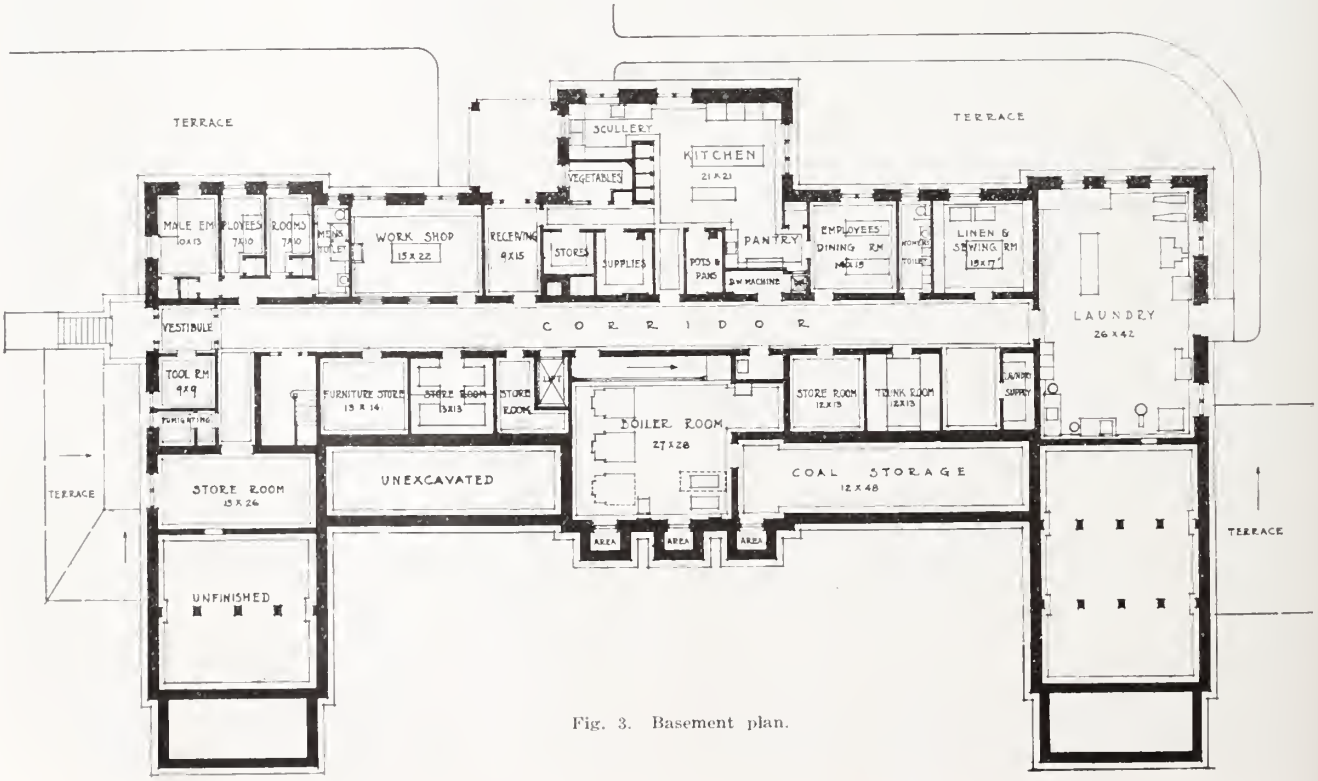

Fig. 3. Basement plan.

for nurses which connects with six individual bedrooms, toilets, and baths; a superintendent's suite; a suite of four double bedrooms with bath and toilet for the maids; and finally, an isolation suite, consisting of two patients' rooms, pantry, toilet, and bath, the patients' rooms opening directly on to a flat roof which can be used, when required, exclusively for segregated patients. Patients who are isolated for any cause will thus enjoy the same advantages of out-door convalescence as the ordinary inmates.

The basement contains the boiler room, cold storage room, trunk room, a series of small store rooms for miscellaneous uses, a room for garden implements, fumigating room, engineer's workshop, a suite of rooms for male employees, a receiving office, kitchen, serving room, employees' dining room, locker room for non-resident female employees, laundry, and a sewing room.

A dining room for officers and nurses is located on the first floor on one side of the principal serving room which, on the other side, opens directly into the patients' dining room.

Future extensions can readily be erected at the east and west extremities of the main corridor; if the wards which are added are not very large, duplication of the existing ward toilet, lavatory, and bathing facilities will not be necessary.

The grounds of the home cover approximately six acres, fronting on McLean avenue in the City of Yonkers; the site is only a few steps from the northerly line of Van Cortlandt Park, which coincides with the New York City limits. The home can be reached directly by trolley and subway from any part of the City of New York.

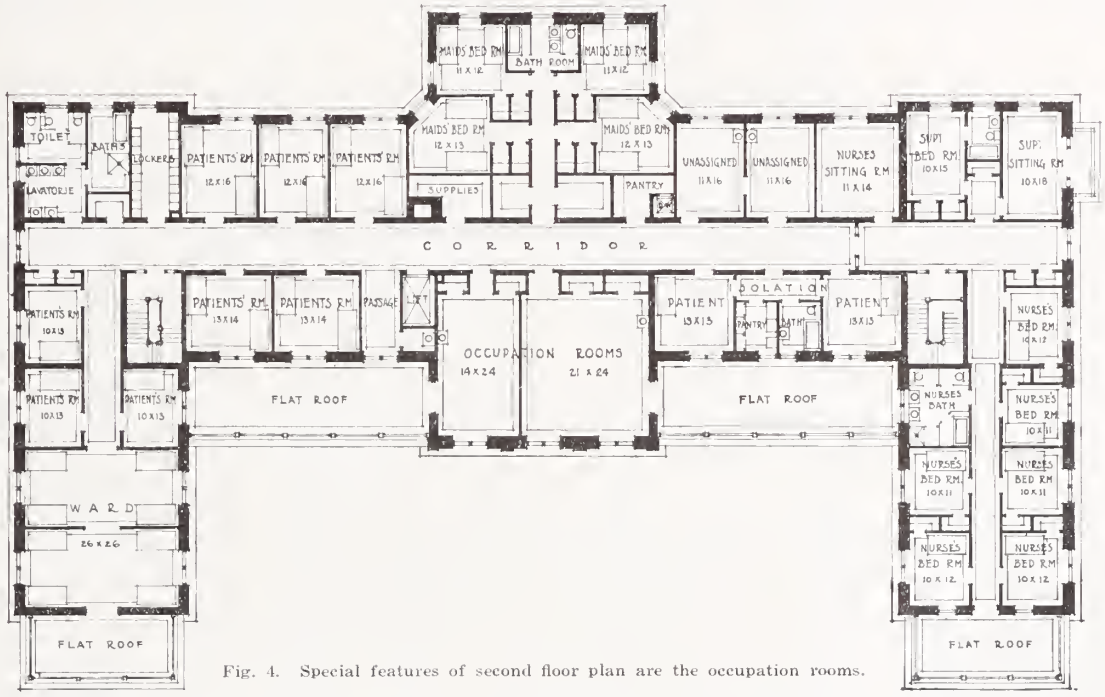

Fig. 4. Special features of second floor plan are the occupation rooms.

The Neustadter Foundation was established under the will of Mrs. Henry Neustadter, and is managed by a board of trustees of which Mr. William I. Walter is president. The endowment fund is $1,000,000.

Moving Picture Machine to Demonstrate Health Maintenance

"The healthmobile, one of the newest means for carrying on public health education utilized by the New York State Department of Health, was shown for the first time at the eighteenth annual conference of health officers," says *Health News*, the organ of the New York State Department of Health.

This is an automobile built especially for the purpose. It is equipped with a stereopticon, a moving picture machine, which is operated by power developed in the healthmobile, and a number of interesting exhibits demonstrating the value of maintaining health and preventing infection. The plan is to send it with a lecturer into rural communities remote from the railroads.

Her "Croix de Guerre"

There is a Red Cross nurse from overseas who wears a short strand of small, round, pink beads. She calls it her "Croix de Guerre." At the height of the big drive in the middle of last summer, just before Chateau Thierry, when the refugees were pouring out of eastern France, a young girl with big dark eyes and her sick baby came with them. While they stayed at the hospital, the baby whimpered and wailed constantly, but with the nurse's care the baby grew very much better. On the day they left, the little mother sought out the nurse whose untiring patience and care had been most marked toward them. "This, ma'm'selle," she said, holding a string of pink beads, "I want you to have it; it is the only thing I have left besides my baby, and you have saved him for me."

A STUDY OF THE PATIENTS' MESS, BASE HOSPITAL, CAMP CUSTER, MICH.

Determination of Food Consumption by a Large Body of Men Under Controlled Conditions—Details Regarding Distribution of Calories, Variety Served and Amount of Cost and Waste Given

By CHARLES N. FREY, Lieutenant, Sanitary Corps, Nutrition Officer, Camp Custer, Mich.

THE following article comprises a detailed study of food consumption, distribution of calories, acid-base equilibrium, variety of food served, and the amount and cost of the waste incurred in a large military hospital over a period of more than four months, the results being shown by means of tables and charts.

The information was collected for the purpose of determining food consumption by a large body of men under controlled conditions. There is nothing original in the method employed in collecting the data or in its presentation, but there is not, in my opinion, sufficient information of this nature in tangible literary form, hence it seemed worth while to present the result of this study.

To conduct a study of this kind it is necessary to weigh all the food consumed, and determine its composition. The analysis and calorie value may be based on the "as purchased" weight of the food, or on the edible weight. For several reasons, it was found desirable to use the former, since it was possible to weigh the food as it entered the kitchen, thereby avoiding the necessity of reweighing after the food was prepared. In making accurate computations, lean must be distinguished from fat meat, and parts of the carcass containing very little bone and much fat from parts containing a large proportion of bone and a small amount of fat or muscle. If bread is made partly of corn flour, analysis must be made from time to time if the substitution is not constant in amount. Milk and cream were analyzed twice per week.

All edible food wasted in the kitchen or in the mess hall must be deducted from the amount prepared so that actual consumption is measured. As a check on the general survey, a specially

TABLE 1. AMOUNT OF FOOD CONSUMED, THE DISTRIBUTION OF CALORIES, COST OF FOOD PER MAN PER DAY, AND THE COST OF FOOD WASTED

Daily average for month of....	Nov.	Dec.	Jan.	Feb.	Mar. 13	Mar. 14	Mar. 15	Mar. 16	Average 4 days	4-Month Average
Average number men regular diet	952	534	302	688	725	726	713	730	723	.....
Number of men on liquid diet..	337	32	35	20	15	17	14	11	14.1	.....
Total men eating at mess.....	986	566	837	708	740	743	727	741	738	.....
Cost of food per day.....	$546.70	$357.27	$511.27	$479.93	$363.47	$375.23	$479.27	$488.83	$426.70	.....
Cost of ration per man, edible and non-caloric	$0.554	$0.631	$0.61	$0.627	$0.491	$0.505	$0.65	$0.66	$0.576	$0.605
Calories per man, the liquid considered half regular diet.....	4235	3780	3227	3811	3086	3618	4588	4088	3822	3764
*Cal. consumed per man, deducting calories wasted.....	4144	3653	3140	3746	3020	3547	4520	4001	3772	3671
Per cent calories protein.....	4227	3767	3209	3802	3054	3586	4565	4061	3816	3749
Per cent calories fat.....	14.2	14.5	16.1	13.9	14.1	13.8	13.2	12.1	13.3	14.6
Per cent calories carbohydrates.	28.6	33.9	40.8	30.6	30.0	38.3	27.2	51.8	36.8	33.4
Grams protein per man per day, all men eating included as regular	57.2	51.6	43.1	55.5	55.9	47.9	59.6	35.1	49.9	52.0
Grams protein, counting liquid half regular	144.36	129.8	123.9	127.57	104.4	121.2	145.7	113.0	121.1	131.4
Pounds food p. m. based on A. lb.† weight edible food and total men eating.....	147.09	133.9	127.1	129.39	106.7	122.58	147.5	115.32	123.0	134.4
Pounds animal protein.....	6.1	6.14	5.66	6.4	4.69	5.35	6.29	5.6	5.48	6.07
Calories consumed per man, based on total men eating....	5556	3277	4768.3	3517.1	121.4	117.2	132.7	148.5	.....	.....
Per cent animal protein.....	4162	3669	3158	3757	3052	3579	4543	4028	3801	3686
Pounds meat p. m. p. d., liquids received no meat.....	58	65	67	63	70.6	60	56	74	65	63
Cal. per lh. based on as purchased weight of edible food..	0.53	0.56	0.65	0.82	0.50	0.87	0.60	0.57	.635	64
Cost of food per lb. based on as purchased weight of edible and non-caloric food (cents).	687	5.81	558	587	650	672	722	719	691	603
Pounds waste per day (edible).	9.05	10.1	10.6	10.4	10.1	9.3	10.34	11.5c	10.31c	10.039
Waste per man (edible) in ounces	26.0	15.7	27.5	10.6	39.0	35.0	23.0	32.0	.....	.....
Calories food wasted per man..	0.41	0.44	0.53	0.24	0.8	0.75	0.5	0.69	0.685	0.405
Cost of table waste computed on cost of ration per pound.....	17.6	15.8	18.0	9.0	32.0	32.0	22.5	27.0	28.4	15.1
‡Cost of waste per man per day	$2.34	$1.58	$2.91	$1.10	$3.93	$3.25	$2.38	$3.68	.....	.....
§Value of garbage sold per day.	0.23c	0.28c	0.35c	0.15c	0.53c	0.44c	0.30c	0.49c	0.44c	0.25c
Actual loss from table and kitchen (edible waste).....	.....	.....	.....	.....	$1.27	$1.24	$0.70	$0.92	$1.03	.....
Actual loss from waste per man per day	.....	.....	.....	.....	$2.66	$2.01	$1.68	$2.76	$2.28	.....
Per cent of ration value wasted	.....	.....	.....	.....	0.36c	0.27c	0.23c	0.37c	0.31c	.....
	.....	.....	.....	.....	.....	....*...	.....	.....	.....	0.58c

*The upper line reading across the page includes men eating regular diet; the lower line, liquids which are counted as equal half regular diet.
†As purchased.
‡Note that waste in each case is less than one cent per man per day.
§Garbage, such as table waste, bones, peelings, etc.

supervised study of seven days in January and four days in March was made. Each operation was checked over very carefully by the nutrition officer and the figures compared with those obtained by the methods used from day to day by the kitchen personnel. It will be noted by examining the tables that the figures obtained by each method correspond very closely.

The method employed in collecting the data was accurate with one exception. During the epidemic of influenza in November, the enlisted men were not uniform in all the wards. Computations revealed that the liquid diet might be as low as 800 calories and as high as 2,000 per man per day. To simplify the matter, therefore, each patient on a liquid diet was considered as consuming about half the food given in the regular diet. This may make the assumed consumption of the patients somewhat high, but as the number of men concerned was always small, the error is not of any consequence.

The total number of patients was obtained daily

TABLE 2. WEIGHT OF PROTEIN, FATS, AND CARBOHYDRATES CONSUMED PER MAN PER DAY, AND THE WEIGHT OF THE MOST IMPORTANT CONSTITUENTS OF THE DIET AS CONSUMED PER MAN PER DAY.*

Month	Cost	No. patients	Prot. g.	Fat g.	CHS. g.	Wt. g. digest food	Lb. food	Lb. meat	Lb. bread	Lb. flour	Lb. potato	Lb. milk	Lb. veg.†	Lb. veg.‡	Lb. veg.§	Wt. fruit†	Wt. fruit‡	Wt. fruit§	cc n/1 Acid	cc n/1 Base
Nov.	.554	986	144.36	126.	576.58	846.94	6.61	0.53	0.67	0.12	0.94	2.3	0.02	1.18	0.3	0.094	0.3	0.07	.....	17.1
Dec.	.63	566	129.	136.	463.8	728.8	6.14	0.56	0.41	0.11	0.7	2.7	0.25	0.9	0.2	0.155	0.41	0.05	.....	26
Jan.	.61	837	123.9	138.9	331.	593.8	5.66	0.65	0.36	0.06	0.79	2.3	0.15	1.02	0.04	0.06	0.4	0.05	.....	29
Feb.	.62	768	127.5	122.6	508.5	758.6	6.4	0.61	0.43	0.11	0.95	2.4	0.2	1.1	0.08	0.06	0.43	0.06	.....	27
Mar.13	.49	740	104.4	99.	417.	620.4	4.69	0.50	0.32	0.0	0.48	2.4	0.06	0.70	.....	0.005	0.17	0.01	.....	20
Mar.14	.505	743	121.	147.5	417.	685.5	5.38	0.85	0.4	0.0	0.606	1.9	0.32	0.61	0.19	0.027	0.62	0.03	.....	45
Mar.15	.65	727	145.7	133.	658.3	937.	6.29	0.60	0.53	0.14	0.63	2.0	0.13	0.9	0.0	0.03	0.59	0.025	30	.....
Mar.16	.66	741	113.	213.	354.	680.	5.6	0.57	0.53	0.19	0.21	2.1	0.03	0.81	0.0	0.04	0.2	0.035	.....	18
Officers' Mess. Feb. 18-28	.326	(Patients.) 35	128.4	154.	635.6	919.	6.8	0.61	0.37	0.11	1.2	1.4	0.2	0.73	.....	0.13	1.	0.01		30

*The calculations were all made on the basis of the "as purchased" weight of the food.
†Canned.
‡Fresh.
§Dried.

were kept on duty in the wards over periods longer than usual. It was therefore impossible to prevent some consumption of the food by these men. The amount was not large but some food was undoubtedly lost in this manner.

All food used in the patients' mess was requisitioned daily. A separate requisition was made out for the sick officers' mess. The sergeant in charge of the store room weighed the food. The menus were made by the dietitian and, being made each day, were based on the needs of the patients. Each ward sent in a request for the number of rations desired, and specified the number of patients on liquid, light, or regular diet. Only a small number of patients, however, were on liquid and light diets.

In the army hospital mess, three diets are generally listed, regular, light, and liquid. The regular diet consists of bread, meat, potatoes, fruits, vegetables, and pastries, and is given to most of the patients. A few patients may be on a light diet, which may or may not contain meat, and often does not differ greatly from the regular diet. Patients on a liquid diet are given milk, eggs, broth, and fruit juices, but seldom any solid food.

During the period of study of the patients' mess, it was necessary to know the food consumption of patients on a liquid diet. It was intended to deduct the food thus consumed, but this plan was found to entail too much work. The diets from the adjutant. By checking up the number served in the wards and in the dining room, it was possible to verify the number of rations actually required and served.

As soon as the patient was able to walk about without discomfort, he ate in the dining room of the patients' mess adjacent to the kitchen. Patients unable to walk had their food served them in the wards. The detachment of men on duty in the kitchen consisting of fifty-five men, except during November when the number was increased to sixty-five because of the influenza epidemic, ate in the dining room of the patients' mess. They are included as patients on a regular diet, it being impossible to weigh their food separately without incurring errors, and necessitating an immense amount of labor and supervision.

The dietitian was given a daily record of the weight and cost of food consumed per day and the number of rations to be isued. After she had made the menus, the sergeant in charge supervised the selection and weighing of the articles of food. The bookkeeper made out an itemized statement giving the weight and cost of each article entering into the ration. Each ward was served the number of rations requested by the surgeon in charge. At the serving counter in the kitchen, slips were posted by the dietitian indicating to the men serving food the number and kind of diets to be given each ward. As the or-

derly appeared and called for the food for his ward, he was served the amounts allotted. The dietitian examined the requisitions from each ward and checked up the food consumption with the ration allowance published by the adjutant each day.

When the food arrived at the ward, it was re-

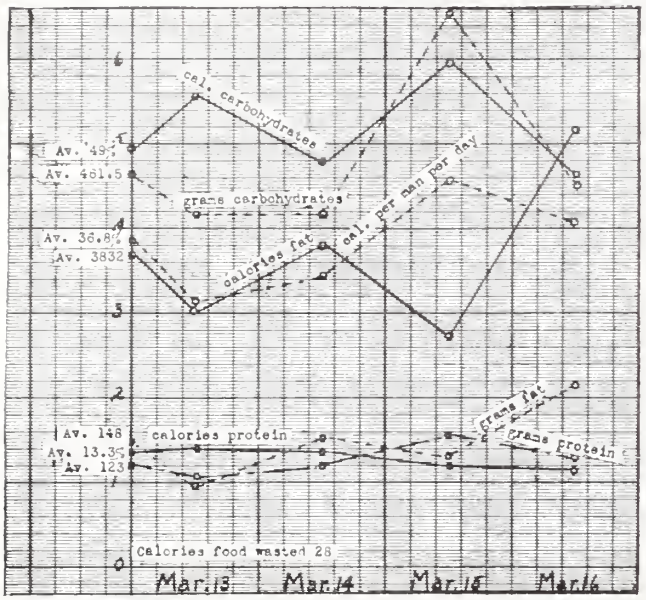

Chart 1. Percentage of calories derived from protein, fat and carbohydrates, and the grams of protein, fat and carbohydrates. The total calories given are shown on this chart. The curve of calories per man per day is nearly parallel to the grams carbohydrates curve. The waste is given below, but is so small that it can not be adequately compared on this chart.

heated over steam and served to the patients. The waste was collected from each ward and from the mess hall and weighed in a small building built for the purpose of handling garbage where it was sorted out and placed in receptacles. The garbage was separated into meat, bone, bread, peelings, fat, and orange and lemon rinds and coffee grounds, and sold to contractors. From the weight of garbage the waste per man per day and the waste per ward were computed. A report of the kind of garbage, and the waste per man per day from the various wards was compiled daily and submitted to the commanding officer.

The food was classified as "edible" and "non-caloric." The analyses of the food are based on the "as purchased" weight. On this basis, meat would include the bone, and apples, oranges, potatoes, and bananas would be weighed as obtained from the market. Under the caption "non-caloric" food were included soda, salt, pepper, baking powder, etc., which give little or no energy to the body when ingested. Baking powder, however, has some food value since it contains starch, as a filler, but as only a small amount was used, the food value was negligible.

Waste was classified as "edible" and "inedible." Under edible waste were included such articles as bread, meat, potatoes, etc., which had been served to the men and left on their plates—in short, all foods which yielded energy, and should have been eaten, but had been discarded. Inedible waste included bones, potato and apple peelings, egg shells, etc. No unnecessary waste was produced in the preparation of the food. Potatoes were peeled by machine, bones were cooked, and soup was made from them. The waste per man is therefore based on the weight of edible food wasted by the men at the table.

Vegetables and fruits were classified as canned, fresh, and dried. Under the term "dried vegetables" were included dry beans such as navy or lima beans. Fresh vegetable included potatoes, onions, cabbage, etc.

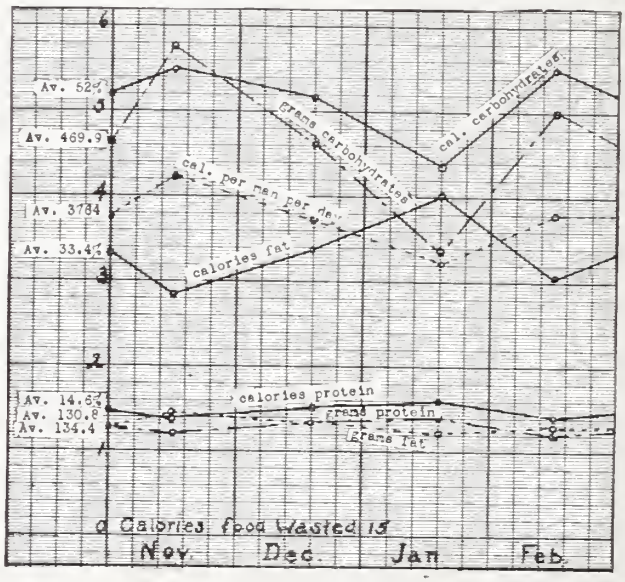

Chart 2. Curve illustrating percentage of protein, fat and carbohydrates in the ration aid the variation from month to month of these constituents. The protein curve is fairly smooth, as is the fat. Note how a lowering of carbohydrates lowers the calorie value of the ration. The curves are nearly parallel.

The patients were not all seriously ill. About 75 per cent were ambulatory. During November, the percentage may have been considerably less, especially during the first two weeks when the influenza epidemic was at its height. After the fever left the men who had influenza, or pneumonia and empyema, there followed a period of intense hunger. An ordinary meal did not satisfy the craving for food. The energy value was not greatly increased, but more bulky food was given and the men ceased complaining of hunger. Officers and nurses remarked that the intense hunger which nearly all the men recovering from influenza complained of, was unusual and that similar conditions in large groups of men had never before been observed by them.. Examination of the table shows that over 4,000 calories per man per day were consumed. This amount is slightly larger than the average food consump-

tion of combat organizations as determined by the Division of Food and Nutrition of the Surgeon General's office. Patients recovering from wounds, fractures, or empyema required large quantities of food, but at this time, November, scarcely a wounded man was in the hospital. During November and December, most of the cases were influenza and related complications, but during January, February, and March, most of the patients consisted of wounded men from overseas. In March, the patients had nearly recovered, and the food consumption, as indicated by the tables, was greater than it had been at any time except November. Exercises were given most of the men to develop them, and this may partly account for the increased food consumption.

The average energy value of the ration for the four months is 3,685 calories. This is a liberal allowance of food. Thompson[1] states that a convalescent should receive the same amount of food

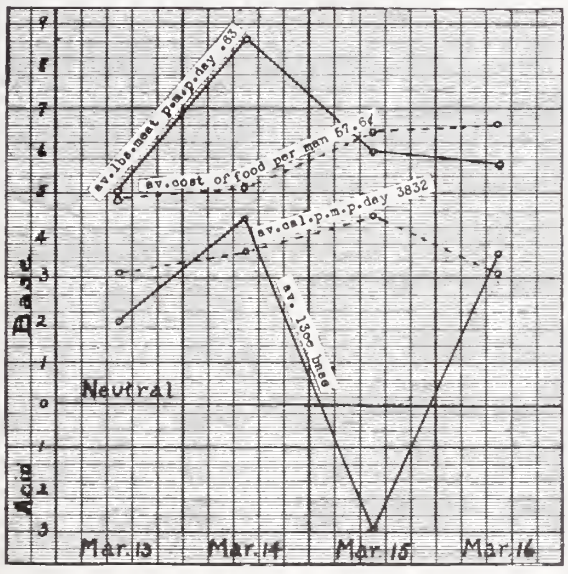

Chart 3. Curves indicating acid base equilibrium, pounds meat per man per day, and calories consumed per man per day.

he would receive or care for if he were well and doing an equivalent amount of work. Seldom is the energy requirement of an individual less in convalescence than in health, if the activity is equivalent. The energy requirement is often more after fever when tissue must be restored and lost weight replaced. Undoubtedly, the custom of eating large quantities of food during the training period caused the men to desire larger amounts of food to satisfy hunger (or habit) when they were recovering from sickness. If a convalescent has little to occupy his mind, the thought of food is very apt to be uppermost, and more food is consumed than under normal conditions. If the bulk were increased and the energy value reduced, the patient might be just as well satisfied. This is actually the case as shown by questioning the men after they had eaten meals low in calorie value but of considerable bulk. The average weight of the food per man per day based on the "as purchased" weight of the articles constituting the diet was approximately 6 pounds. Much of this weight, however, was not edible food. The edible food as prepared for the table may not have weighed more than 3½ to 4½ pounds.

Two interesting curves are shown in Charts 5 and 6. The curves giving the pounds of food per man per day are found to be parallel to the curves representing the calories per man per day. This would indicate that the ration was balanced with the idea of preventing fluctuation in composition due to fatty foods or extremely bulky foods like fruits and vegetables. There is perhaps no better or simpler method for obtaining an idea of the skill exerted in composing a ration than the production of such curves. A study of the curves from day to day brings out many instructive facts. Great fluctuations in either curve would indicate a lack of proportion and poor composition.

The distribution of calories agrees fairly well with the requirements considered essential by physiologists and dietitians. American diets a

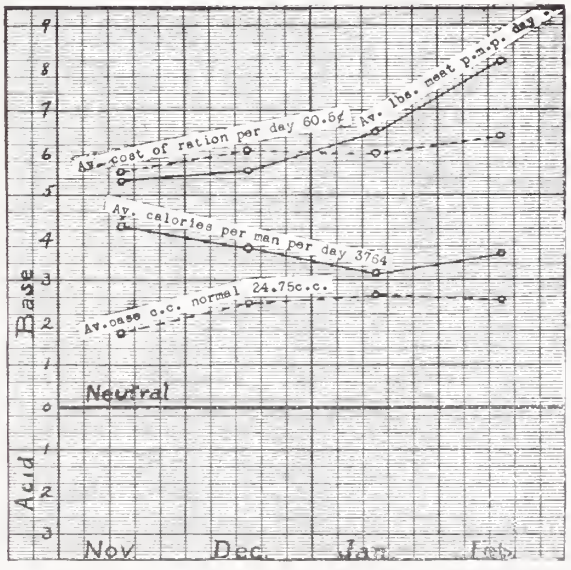

Chart 4. Curves indicating acid base equilibrium, pounds meat per man per day, and calories per man per day.

generally high in protein and fat. Hutchinson's "Principles of Dietetics,"[2] gives a list of diets in which the amount of fat is much less than is usually given in American dietaries. A ration containing 3,500 calories, of which 13 to 14 per

1. Thompson, W. G.: Dietetics.

2. Hutchinson, R.: Principles of Dietetics.

cent of the calories are derived from protein and 25 to 30 per cent from fat, is considered a good distribution for a man in health. As most of the patients had no metabolic disturbances, and were rebuilding their bodies, this proportion would perhaps be well fitted to their conditions. Under some conditions, a low protein diet is advisable; perhaps many patients may be found who cannot endure a diet containing much fat, and in a large hospital, one must consider the individual as well as the average. The tables indicate that for the period of four months, the average consumption of protein was 14.6 per cent of the total calories and of fat, 33.9 per cent—values not very far from accepted standards.

The amount of protein for the four months averages 131.4 grams per man per day, all men considered as on the regular diet. About 64 per cent, or 85 grams, of the protein was derived from animal sources—meat, milk and eggs—and approximately 40 grams were derived from meat alone. Over 2.3 pounds of milk were consumed per man per day during the four months under consideration, an amount which would yield nearly 38 grams of protein. However, if a larger percentage of the protein were derived from meat, it might be deemed undesirable to give so great an amount. A high percentage of protein derived from purin-containing foods like meat is not recommended. Most of the patients were well as far as digestive and metabolic functions were concerned. Whether a low protein diet would have been as favorable might be questioned.

TABLE 3. DATA ON FOOD CONSUMPTION OF OFFICERS' MESS, FEBRUARY 18 TO FEBRUARY 28, 1919, INCLUSIVE.

Total men fed	392
Number of men per day	35
Light diet per day	1
Total cost of food	$318.00
Pounds edible food	2643
Pounds non-calorie food (such as soda, salt, etc.)	18
Total pounds of food	2661
Cost of ration per day	$0.826
Cost of food per pound	11.9c
Average calories per man per day	4097
Calories food wasted	54
Average calories consumed per day	4043
Per cent calories protein	11.6
Per cent calories fat	31.6
Per cent calories carbohydrates	56.8
Grams protein per man per day	129.39
Animal protein 75.46 lbs. for 11 days	75.46
Per cent animal protein	69.8
Pounds food per man per day (as purchased weight)	3.8
Calories per pound of food	600
Total pounds waste per day	3.2
Ounces waste per man	1.45
Calories of waste per man	54
Cost of waste per man	1.07c
Pounds of meat per man per day	0.61

Thompson[1] gives a large number of convalescent diets in which 8 to 12 ounces of meat per man per day are prescribed. Perhaps as good results as were achieved at Camp Custer Hospital could have been obtained with much less protein, but no comparative data are at hand to indicate what proportion is best in actual practice. The amount of meat given per man per day is smaller than the amount usually given in army hospitals. One must also consider the feeling of the men to be fed. No officer is likely to resist long the clamor of the patients for some article of food of which they are especially fond. The army ration usually contains a large amount of meat, and it is often hard for the patients to accustom

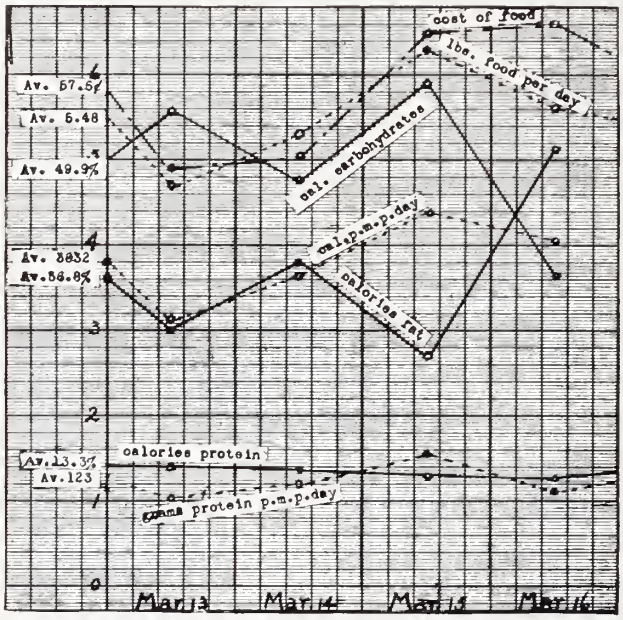

Chart 5. Curves showing percentage of protein, fat carbohydrates consumed during March 13, 14, 15, and 16. The cost of food, pounds of food per day, and grams of protein are also given in terms of one man per day. Waste is so small that it can not be expressed on this scale.

themselves to smaller amounts when they reach the hospital. To the believers in the Chittenden standards, the amount of protein given may seem far too large, and the appetite no reliable guide in the choice of food.

The difference in the kind of meat consumed causes fluctuations in the matter of total calories, and percentage of protein and fat as shown on March 16 (Table 1), but the kind of meat was not the determining factor when a long period is considered, as the following data indicates. During November, December, January and February there was consumed per man per day the amounts of meat expressed in pounds as shown in Table 5.

TABLE 5. AMOUNTS OF MEAT USED, NOVEMBER-FEBRUARY

	Beef	Beef Organs	Pork	Lamb	Veal	Fish	Chicken
	lb.	lb.	lb.	lb.	lb.	lb.	lb.
November	0.25	0.009	0.05	0.02	0.055	0.021	0.107
December	0.2	0.014	0.073	0.03	0.23	0.048	0.139
January	0.259	0.017	0.102	0.081	0.03	0.059	0.092
February	0.38	0.005	0.139	0.05	0.064	0.010	0.07

TABLE 6. AMOUNTS OF FOOD IN COMPARISON WITH TOTAL CALORIES

	November	December	January	February
Grams fat	126	126	138.9	122.6
Grams carbohydrates	587	463	331	508
Pound meat	0.53	0.56	0.65	0.81
Pounds bread	0.67	0.41	0.36	0.43
Pounds food	6.61	6.14	5.66	6.4
Calories per man per day	4,235	3,783	3,227	3,811

Table 6 shows that the meats were fed in constantly increasing amounts especially the chief

constituents, beef and pork. In January, the calorie value was lower than during the other three months, but the amount of meat consumed was higher than in November and December. The fat content was higher in January than in any other month studied, but the carbohydrates were lowest in amount. The amount of bread, milk and flour consumed was also smaller than

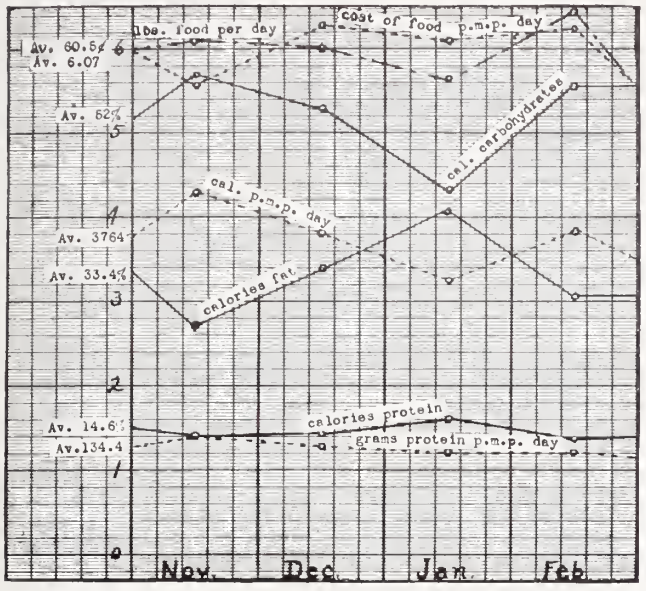

Chart 6. Curves showing percentage of calories derived from protein, fats and carbohydrates and the total calories contained in the ration. The lower dotted curve shows the grams of protein given per man per day. Curves showing cost of food and pounds of food per man per day are also given.

during the other three months. It is evident that foods which contain carbohydrates are necessary to supplement a diet fairly rich in meats to increase its energy value. The ration may be high in energy, due to the use of pork and bacon as on January 14 (Table 4), but not enough meat, rich in fat, is given each day to bring up the calorie value. Carbohydrates may increase the energy value enormously as on March 15 (Table 2), for on this day 658 grams were consumed. So large an amount is unusual, and was due to the consumption of bread, biscuits, and jelly.

Discrimination in the amount and source of carbohydrates is indicated in the menus. Some forms of pastry may cause considerable digestive disturbance. The action of sugar in large quantities is irritating to the digestive tract, or may be the cause of fermentation. Puddings and light cakes seem to be digested more easily than pies. Carbohydrates are a cheap source of energy, and when supplied in the form of bread, cereals, etc., balance up the diet and increase its physiological value. The craving for sweets must be satisfied, and much skill is required to plan menus which contain the proper amount.

Charts 1 and 2 show that the curves giving the calories per man per day are roughly parallel with the curves giving the percentage of calories derived from carbohydrates. This relation is not true if large amounts of fat are consumed as on March 16 (Table 1). As previously stated, when a large number of days is considered, it is found that the calorie value of the ration is not determined mainly by the amount of meat consumed, as shown in Charts 3 and 4, but by the carbohydrates consumed. It is, therefore, important that proper consideration be given in the selection of the carbohydrates. Rations high in meat are often deficient in calories and in bulk. Much stress is always placed on the protein in the diet, and properly so, but the carbohydrates should require as much attention as any factor, and the foods that are to supply the greater part of the energy should be selected with judgment and discrimination.

Vegetables and fruits formed a large part of the diet, and were well distributed. Potatoes are included as a fresh vegetable. Fresh fruits and vegetables were given to the patients each day. Dried and canned fruits were used in large quantities, but not to the exclusion of fresh fruits. Apples, oranges, bananas, and pears, with occasionally grapes, were the chief fresh fruits used. On account of the high cost of fresh vegetables during the winter, the supply was somewhat restricted, and consisted chiefly of potatoes, onions, carrots, turnips, beets, celery, cauliflower, cabbage, and sometimes head lettuce.

All patients who showed any serious derange-

TABLE 4. SUMMARY OF RATION STUDY (DURING WEEK OF JANUARY 13-19, 1919)

	Calories per man	Per cent Cal. protein	Per cent Cal. fat	Per cent Cal. Carbohydrates	Per cent animal protein	Per cent vegetable protein	Lbs. food per day	Cal. per lb. of food issued	Oz. of food wasted per day
Monday	3175	16.4	39.2	45.4	74.4	26.6	4.76	667	3/8
Tuesday	4258	11.3	46.5	42.2	65.1	34.9	6.04	705	1/4
Wednesday ..	3673	13.6	37.6	49.	67.7	32.3	5.65	650	1/8
Thursday	4418	13.5	42.7	43.8	59.	41.	6.16	733	1/4
Friday	2855	15.8	28.	56.4	61.3	38.7	5.6	510	1/4
Saturday	3690	12.1	35.4	52.5	59.2	40.8	5.69	647	1/4
Sunday	3420	15.8	38.4	45.7	76.	24.	6.02	559	1/4
Average	3638	14.	38.2	48.	66.1	33.9	5.7	639	26 oz.

	Calories of food wasted	Per cent of cal. of food issued wasted in garbage	Acid N/CC	Acid per man per day	Base N/CC	Base per man per day	Grams of protein per man per day
Monday	16	0.50	.....	.....	1125	1.8	118.95
Tuesday	11	0.25	.....	.....	9369	15.6	117.13
Wednesday ..	8	0.22	473	0.74	.....	.....	121.67
Thursday	11	0.25	.....	.....	75884	11.3	145.73
Friday	8	0.28	.....	.....	3040	4.1	108.96
Saturday	10	0.37	.....	.....	17724	25.	108.9
Sunday	9	0.27	.....	.....	17778	24.4	131.6
Average	10.3	0.305	473	0.74	20820	30.6	121.85

ments in their metabolic functions were placed under the care of a dietitian, who devoted her time entirely to this kind of work. Cases of diabetes and albuminuria were given special diets and these patients were not allowed to eat at the regular mess. The dietitian watched the men while eating to see that they received the food

prepared for them. A special diet kitchen was established for this work.

Owing to the large consumption of vegetables, fruits and milk, the ration was alkaline. Occasionally it might be acid, especially if the consumption of certain fruits and milk was low, as on March 15 (Table 2). The acid-base figures were computed from tables compiled by Dr. H. C. Sherman and published in his book entitled "Food Products," and from figures transmitted to me by Dr. Sherman through personal correspondence. Dr. N. R. Blatherwick was also consulted in regard to some of the figures. No corrections were made for organic acids not oxidized in the body such as are found in prunes and cranberries, nor for sulphur which may have been added to dried apples during the drying process. Whether it is necessary for the diet to be neutral or alkaline when a liberal amount of protein is consumed, is a question physiologists have not definitely settled for us. The difference between a hospital diet and the diet of a combat organization is rather striking. The hospital diet is nearly always alkaline, and the company diet acid. Only in cases in which organization reduced the amount of meat consumed, below that of the average, and expended more than the average allowance for fruits and vegetables, were the diets alkaline. No one has conclusively demonstrated the complex relation between diet and disease, but if any exists, it had ample opportunity to assert itself. Studies made by the section of food and nutrition, Surgeon-General's office, seem to indicate that there may be some relation, but on account of the varied activities of the men, the opportunities for exposure to disease, and the long periods of study required, no definite conclusions could be formulated. More work of this nature should be undertaken in the large hospitals.

Data compiled at the laboratory seem to indicate that the urine of men fed on the diet as given in the company mess is acid. Of 205 patients whose urine was examined at the Base Hospital laboratory upon entrance to the hospital, only 7 had urine neutral to litmus, and 5 had alkaline urine. Two hundred and seventy-four examinations of urine were recorded, of which 262 indicated acid urine. Only 7 examinations made of men while in the hospital are recorded, of which 2 are alkaline, 4 acid and 1 neutral. It is regretted that more data are not available and that the history of the patients could not be followed as their diet changed.

The cost of the ration is shown to be dependent largely on the kind and the amount of meat and eggs, and to a lesser extent on the quantity of milk and fruit consumed. While fresh vegetables and fruits are expensive, the amount of meat from the standpoint of nutrition, can be reduced and be replaced by fruits and vegetables to good advantage. On March 16 (Table 1), the cost of the ration as indicated by the tables, was 66 cents. Pork loin and eggs were responsible for increasing the cost. The quantity of fresh fruit given that day was less than half the amount given March 14, although the amount of fresh vegetables was slightly greater March 16. On March 15, no eggs were served, but beef and oysters constituted the meat constituents of the ration. Had it not been for the oysters, the cost would have been much less on that day. On March 14, the amount of meat was high, but the cost was low, since fish formed the greater part of the meat consumed. Pork and beans for supper and oatmeal for breakfast constituted the chief constituents furnishing protein, and their cost is small. March 13, dried beef, fresh beef, and macaroni were used, and the ration cost 49 cents. A small amount of fresh fruit was used, and the fresh vegetables consisted of beets, potatoes, and cabbage. During February, most of the patients were able to walk about and the amount of meat consumed was greater, having increased to 0.8 pounds per man per day. The cost of the ration was also greater than during the preceding month of January, and the energy value was greater. During December, the cost was increased by the Christmas dinner and part of the New Year's dinner. Large quantities of milk, fresh fruit, meat, and canned vegetables were cansumed, and the market facilities were not as good as during November and January.

The figures compiled during the week of January 13-19 (Table 4), indicate by per cent the amount of waste in proportion to the amount served. Considering that in many well-regulated messes the waste amounts to from 1 to 10 per cent of the ration issued, that in a hospital might reasonably be expected to be even greater. That it was small, shows how effective the system of checking proved to be.

The weight of edible food wasted was very small. The average weight of waste per man per day in ounces for the four months was 0.4 and it increased during March. The cost of the waste per man per day was 0.346 cents or 0.58 per cent of the average value of the ration. This value is based on the "as purchased" weight of the food, and is somewhat low as the edible food is worth more per pound. The inedible waste, such as bones and peelings, and the table waste, consisting of scraps of bread and meat, were sold.

A study of the figures on waste given in the tables indicated that if the waste of edible food

from the table is reduced to the utmost, the value of the inedible garbage reduces the loss from edible waste materially, from 44 cents to 31 cents. These figures were obtained from studies made during the four days of March (Table 1). All waste was carefully measured, and the constituents separated and weighed so the value could be determined.

The data from the sick officers' mess (Table 3), were compiled for comparison with the enlisted men's mess. The amount of meat consumed was larger than that of the enlisted men, and consisted of cutlets, chicken, and beef tenderloin which is expensive. More fresh fruit was also consumed. Otherwise, the amounts of food consumed were nearly equal, except milk, of which the officers consumed less than the enlisted men. The difference in cost is rather striking as the calorie value is not much greater than that of the patients' mess.

The composition of the food was determined from Bryant and Atwater's tables of analyses, and from analyses made by Major Milner for the food division, Surgeon-General's office. The acid base figures were obtained from Dr. Sherman's tables in his book entitled "Food Products."[3]

The data for this paper were collected under the supervision of Col. Creighton, camp surgeon, and Col. Irons, commanding officer of Base Hospital at Camp Custer. The dietitians, Miss Wright and Miss Stevenson at the base hospital, aided in collecting material, and in giving helpful suggestions. The data on acid and alkaline urines were collected by Capt. Burhams of the laboratory at Camp Custer. The earnest cooperation and interest shown by Col. Irons greatly facilitated the work.

CAN HOSPITAL EQUIPMENT BE STANDARDIZED?*

Agreement on Requirements and Co-operation With Manufacturers Will Achieve Desired Result—Some Reasons Why Standardization of Buildings is Impracticable—Conservation of Human Energy Chief Goal

By EDWARD F. STEVENS, A.I.A., Architect, Boston, Mass.

THE great problem today in every branch of industry and science, whether in the factory, the store, the hospital, or the home, is the conservation of human energy. The methods by which this can be effected and the end-results attained are interesting every institution. The end-result desired for the hospital, is the speedy, successful convalescence of the patient; and much can be done toward attaining it by planning the detail and the equipment of the hospital.

The subject of the planning of the hospital has been many, many times discussed; but less has been said about the details and equipment.

The "*ideal*" hospital has been planned many times but has been found, when built, to lack that idealism which its author sought; perhaps from the lack of proper functioning of one part with another; perhaps because medical and surgical science had advanced while the building was being erected.

The standardizing of hospitals from the planning of the building to the discharge of the patient has been much discussed, and is being considered here at these meetings; but is it possible to bring about any standard plan which will be equally successful for any site other than the one for which the building was planned? I think not. This was found impracticable even in the large units of the recent army hospitals; for even on the southern plains and the western prairies, it was not always possible for the hospital to "face the cantonment," or for the standard plan to be carried out; for the ground was not always level, and the sun *will* rise in the east and set in the west, no matter where the hospital site is located. And so with the civic hospital; the aspect, the environment, and the limitations of the site must all be considered.

In the matter of equipment, however, it is different. Standards which have been found from practice to be the *best* can and should be secured —standards which, by their simplicity of construction, freedom from expensive repairs, and hygienic qualities should appeal to the good judgment of the head of every institution.

This is particularly true in regard to plumbing equipment. With the number of hospitals bein built today, why should we be satisfied with the fixture designed ages ago for domestic uses when, by making new molds, simpler, more hygienic, and more practical fixtures can be had?

Take, for example, the wash-bowl or basin. In the modern hospital of today, the fixed basin is being placed in practically every patient's room, and the average basin which is being offered by the fixture dealer lacks the first principle o. hygienic construction.

*Read at the Twenty-first Annual Convention of the American Hospital Association, Cincinnati, Ohio, Sept. 8-12, 1919.

3. Sherman, H. C.: Food Products.

Did you ever see one of these basins broken open so as to show the inside of the overflow?—for it is always carefully concealed from view by a screen of some sort. I went to a dealer the other day and asked him for a discarded basin. I had it broken so as to show just what was on the inside of this overflow—that it was not exactly what one would wish to have near a very ill patient. The foulness that existed there exists in 90 per cent of the bowls sold today within six months after they are installed. To overcome this, it is necessary only to omit the integral overflow and to demand a visible, cleanable standpipe, which, if made of celluloid, is no more trouble to apply than the regular plug.

But for the every-day use of "scrub-up," or for filling basin or pitcher, why fill the bowl at all? Why not wash as the Moslems always have, under running water? To do this, a simple combination fixture can be used which delivers both hot and cold water through the same nozzle; and by the introduction of slightly elongated handles to the faucet, you have at once an elbow-controlled valve, suitable for scrubbing-up, for examination of patients, or for any other purpose.

In planning the plumbing equipment for the United States overseas hospitals, a standard cock was designed for use in all basins, sinks, tubs, bathing trays, slop sinks, and even the autopsy tables. The only change between the surgeons' scrub-up and the kitchen sink was that in the latter a plain handle was substituted for the elbow handle and the spray attachment was omitted.

It may not be possible to standardize the trap, for different building codes have different requirements, but there is one general requirement which I make in my own practice, and that is that there be a clear way from the bottom of the bowl, tub, or whatever the fixture, to the water line of the trap. This requires a removable strainer, but it does allow for the thorough cleaning of the waste to the water line.

The equipment for the bathing of patients, large and small, is one on which not enough thought has been expended. In many of the large hospitals of Europe, and I am glad to say in this country, also, no patient is admitted without being *bathed*—not put through a tub of water which becomes fouled as soon as entered, but actually bathed in running water by the attendant—for there is a difference between tubbing and bathing.

While this form of bathing can be done in the regular tub, it is accomplished with much discomfort to the attendant as well as to the patient; so the slab bath or tray has come into quite general use in some hospitals. To warm these slabs for the comfort of the patients, hot water can be drawn a few inches in depth just previous to the bath's being given, while for the infant's bath the hollow portion under the slab can be filled with hot water which will warm the slab for hours.

The deep tub for those who can bathe themselves, can be greatly simplified and standardized as to size, water supply, and outlet.

The continuous flow tub or water bed used now in the psychiatric departments of the hospital as well as for treatment in other departments, should have certain standard requirements not now obtained in many makes.

And so we might go through the entire list of plumbing fixtures—floor traps, those most forgotten of fixtures; standard non-hand-touching fixtures for departments for communicable diseases; slop sinks—the *bête noir* of every hospital; and the kitchen sinks. All of these, with careful study with the leading manufacturers, can, I believe, be simplified and standardized to give a greater efficiency.

Much has already been done to standardize the laundry and kitchen equipment, and one may obtain bids from various manufacturers from one specification, the tendency being toward simplification. Not enough thought, however, is being given to the hygienic construction to reduce the labor in properly caring for the fixtures. This will be noted if we compare the fixtures in this country with those in similar institutions in Europe, where in many cases the hygienic condition of the equipment of the kitchen equals that of our operating departments. Our manufacturers are ready to make these improvements if the hospitals will only demand them, and a standard can be determined upon.

With Mr. Kimball's paper on heating and ventilation, I hesitate to call attention to possible standards which might be adopted which would simplify the care of the apparatus without loss of efficiency, for example: The smooth radiators suspended from the wall, leaving the floor free; a simpler method of introducing fresh warm air to the room; and a simpler method of ventilation than is commonly practiced.

To standardize the furniture in the patient's room would cause a monotony which might be depressive, but the construction of the beds, the screens, and the bedside tables should have standard requirements.

Perhaps there is no subject about which there is a greater divergence of opinion than how to care for patients' clothing—from the individual locker to the common room with hooks on the wall. A method which I found in use in a large

European hospital, which has been used in many of my own hospitals, and which, perhaps, I have mentioned before, is the washable individual locker made of heavy cloth, held in shape by a loose metal grille at top and bottom, and hung on simple metal rods in the general clothing room. The patient can place the clothing in the locker in the admitting room, tie and *seal* if desired, and when discharged may remove the garments in the same condition as when put in.

Great economy can be shown by standardizing the size of sterilizers, so that the dressing drums, for instance, of one manufacture can be used in the sterilizer of another make.

With a number of rooms needing sterile water, greater simplicity and efficiency is shown by a central water sterilizer or still, with water conducted to the various locations needed, and reheated at the point of outlet.

There would seem to be less thought expended on the subject of hospital hardware than on almost any other item of equipment. The cloth "gag" tied around the noisy latch bolt of the expensive lock is a common sight in the majority of hospitals, when a simpler and cheaper piece of hardware, eliminating the latch bolt, would add greatly to the efficiency, and a standard could easily be reached which the manufacturer would be glad to follow.

While I have merely touched on some of the possibilities of standards of hospital equipment, the subject is one which should be carefully considered by a large committee, whose findings could be given to the hospital world.

HOSPITAL SOCIAL SERVICE—A FEW POINTS

The Duties and Privileges of the Social Service Department—Its Personnel—The Question of Volunteer Help

Just what is the purpose of a hospital social service department? This question, so often discussed among hospital administrators, is answered by Etelka Weiss, R.N., director of social service in the Hebrew Hospital, Baltimore, Md., in the *Social Service Quarterly*.

One often hears beautifully expressed, idealistic, but rather hazy and unsatisfactory, replies to this query, Miss Weiss, however, sidesteps all vagueness when she gives the following concise definition of the purpose of a hospital social service department: first, to enable the physician to give more intelligent service to the individual patient by bringing social facts about the patient to his attention; second, to supplement the treatment by such services as the patient needs but the doctor can not give; third, to coordinate all medical care needed by the patient which can not be obtained in the same department of the hospital; fourth, to make it as little humiliating as possible for the self-respecting poor who need the free services of the doctor and the hospital, at the same time eliminating the abusers of free hospital care; and fifth, to act as an educational agency along the lines of public health in the community which it serves.

In order to carry out these purposes most satisfactorily, the director of the department should be a trained nurse, who, because of her considerable experience in dealing with human ills, is best fitted for the work. Especially is this true if, in addition to her experience, she has had some special training in social economy.

If the size of the hospital permits it, a financial investigator, who need not be a nurse, should be added to the staff. The worker herself should not be called upon to make definite financial investigations, for this decreases her prestige and influence in the community and is likely to dispel, instead of inspire, the confidence of the clientele.

The employing of volunteer help in hospital social service work is beset with difficulties. The taking of patients to and from the dispensaries is about the most useful help a volunteer can render unless she is a trained worker. Volunteers might be utilized for office work, but this is seldom a safe practice, for, unless they have had office experience, they are likely to work havoc in the department records. The system of record keeping should be simple and complete. Elaborate records are both expensive and unnecessary.

It is advisable that a hospital social service department should have an available fund at the disposal of its director. Many times the constructive work in a family may be arrested for the lack of a few dollars with which to buy some articles of infinite value to a member of the family, but for which no organization seems to have a fund and which, consequently, no one supplies. This is nothing short of wasteful. It is foolish to spend time and effort in curing a man of a certain kind of stomach trouble when he has pyorrhea and what he needs is a set of teeth, for which, alas, the social service department must pay.

The esthetic should not be ignored. The office in which private interviews are held should be made as attractive as possible, for the psychological effect of a dingy, ugly office on the minds of the client and workers is not good. When a patient enters the social service room he enters into the abode of a friend in need. A conglomeration of office furniture, files, papers, records, revolving chairs, and dust is not very encouraging to the troubled person, and he will instinctively put himself on the defensive against the official prober into the whys and wherefores of his troubles, to whom he has been forced to go in his extreme need. If, in addition to this, the worker calmly goes on with what she happens to be occupied, pays no attention to the "intruder" and, after five or ten minutes (it is well to remember each minute is a veritable century to the person in trouble), she fires a deliberate: "Well?" at the applicant, some of the strongest foundations for constructive work are shattered. A clean office, a pretty wall, a few pictures, perhaps a few flowers, and a smiling "Won't you just sit down and I will see you in a few minutes?" make a world of difference.

When the social service department office is situated in the dispensary, the best policy the director can follow, in determining just where its sphere begins and ends, is simply to be of as much service to the dispensary staff, to the patients, and to outside agencies as it is possible to be without encroaching on other workers' fields or allowing herself to be imposed upon too much. This is indeed a difficult feat and requires much tact, but tact is an essential requisite of the hospital social worker.

The results obtained by an efficient social service department manifest themselves not only by the actual number of cases handled or by helpfulness to other agencies doing social work, but by the successful termination of efforts when dealing with individual cases.

The MODERN HOSPITAL

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Should the Hospitals Strike?

The right to organize, and if necessary to strike to obtain an income sufficient to defray necessary living expenses is universally conceded to industrial workers whose services the community requires; if to industrial workers, why not to hospitals? The services of hospitals are necessary—increasingly so day by day, and the depreciation of the dollar is eating into the hospitals' vitals. What means has the average hospital of recovering financial health? Let us see.

There is, first of all, the item of actual hospital earnings, consisting mainly of patients' payments. In this department increased income to balance in part a rise of from 75 per cent to 90 per cent in maintenance costs during the past five years, may be obtained either by raising rates, or by increasing the number of paying patients. In most communities, the relative number of paying patients has increased without effort on the part of the hospitals, owing to enhanced individual or family income in this country during the world war. Moreover, many hospitals have judiciously advanced their ward and private room charges in proportion to the increase in maintenance cost. If there are any that have not done so, and if, as I believe, the depreciated dollar is with us to stay, the sooner such hospitals resort to appropriate action, the better for their financial health. Patients who are prospering will understand the situation, and will pay without grumbling. It follows that payments made on behalf of patients by insurance carriers, under state compensation laws, or appropriations voluntarily granted by municipalities for the support of "public charges," should be correspondingly increased. In these departments many hospitals have not yet claimed what is due them.

But a considerable part of the work of the average hospital continues to be done gratuitously, and will be, let us hope, at least until sickness insurance is universally provided. The gratuitous work of hospitals is supported either by contributions which are currently received and exhausted, or by income derived from permanent funds that have been established by gift or legacy.

In the past, hospitals were esteemed fortunate in proportion to their permanent investments; the permanent investment eased the minds of hospital managers, for with reasonable care in the placing of the principal, the income was secure, and not subject to depreciation. Then came the war; followed war prices; followed, more terrifying still, *post-war* prices, and hospitals which had planned their work on the basis of income from invested funds found themselves—and still find themselves—facing a deficit that looms larger with every passing hour.

The war and its train of events have impoverished the hospitals, and today they stand facing a gloomy future. Those whose reserves were slender are threatened with an immediate curtailment of their work; the evil day may be farther off for those whose resources were somewhat greater but for them, too, disaster is possible.

What's to be done? Shall the hospitals borrow a leaf from the book of industrial history?

Labor will not be defrauded—wages must be adjusted to conform to the newer currency standard. Through organization, chiefly, labor quickly reestablishes its right to a living wage. Through organization, labor compels the community at large to acknowledge and to provide for its needs. Through organization, the hospitals can do the same. The hospitals are but an arm of the community itself, as the industrial working class is part of the body politic. The starvation of labor in any vital industry would impoverish and perhaps paralyze the state; the starvation of the hospitals would materially weaken the whole of society. It is appalling to contemplate what it would do to the dependent sick. Not in selfishness, not in greed, not in a spirit of class hatred, but in the honest desire to serve, the hospitals should act and act speedily. *Every man and*

woman in the country must be made aware of the reasons why the invested capital of hospitals must be doubled!

No need after this is done for the hospitals to close their doors. If the American Hospital Association, which will meet before these lines appear in print, should fail at Cincinnati to start a movement towards this end, it will have failed to perform the duty of the hour.

S. S. GOLDWATER, M.D.

A Red Apple and Wisdom

Again the apples are turning red, and they remind you, perhaps, of a lane, a wonderful appetite, a barefoot youngster, and other red apples. Perhaps, once upon a time, you stood just outside of an orchard fence considering the apples. You were getting your bearings and making up your mind. Then suddenly you were startled by a kind voice saying, "Here, boy, catch." An old man with a basket on his left arm stood just inside of the fence; in his right hand, poised to throw, was a red apple. He smiled and threw. You caught the apple and said, "Thank you," in confusion. Then you ran home and fed the cat and heaped the woodbox over with fire-sticks for your mother, not merely to be good, but just to get used to the revelation of the apple, feeling that you needed more room to live in than all outdoors affords.

Well, that red-apple incident is a parable. On such occasions more goes on inside of us than we know. The old man is gone, but he left us with a debt to pay—and pay—and pay. You are now a hospital superintendent, or a nurse, or a doctor. You own the orchard, so to speak. How often do you say, "Here, boy, catch"? Do you pay the old man in that way?

The writer recently walked into the laboratory of a large western hospital. There the pathologist sat on a stool by his table, disgruntled and discouraged. We introduced ourselves, then talked. Gradually these facts developed: The pathologist was competent and devoted to his work. He was well paid. But the laboratory routine, day in and day out, unrelieved, had the best of him. Not in eighteen months had the hospital superintendent been in the laboratory; not a doctor had gone to him with an expression of gratitude for his reports. The doctors were grateful, but had not said so. There were no staff meetings. Nobody cared much about anything—doctors, superintendents, trustees, laboratory workers, nurses—they lived in a drab world.

And now what? Well, the superintendent was a failure, an utter failure. He knew enough. He had enough training and intelligence, but very little wisdom. To give away a red apple was beyond him. To recognize with a pleasant word the tact and sense of a nurse with a difficult patient was beyond him.

But to think forward is the thing. The spirit of, "Here, boy, catch!" would change that hospital as though Robin Hood came out of the woods again in the moonlight and touched the wards to poetry. Just for a red apple or two the whole hospital would always feed the cat. May we ask how often you, the superintendent, go from the kitchen to the garret of your hospital and how much of the sunlit principles of wholesome sense you scatter as you go? And while we are on this subject, isn't it worth while any way to start off each morning having forgiven everybody everything?

Renewed Need for Hospital Economies

Making ends meet in operating a hospital was always difficult. Today, the continuing high cost of materials and services complicates the problem. The management and superintendent are put to their wits' end to make the income cover the outgo. Most superintendents feel that they have already exhausted all means of economy, and that little can now be done, except to secure a larger income. Such a condition of efficiency may exist with some hospitals, yet the discovery of new sources of economies in manufacturing plants, which in the past have been examined in all processes, lend the hope that there may still be some features of operation in hospitals which may be simplified.

At this time of high costs, it may be of advantage to list some of the features of hospital operation that are most often subject to improvement.

There should be a standard of heating efficiency for each hospital, taking into consideration its geographical and topographical location, its exposures, window openings, height of ceilings, wall construction and amount of radiating surface. Competent heating engineers can determine for each hospital, the amount of coal that should fill the requirements. If more is customarily used than the calculation indicates to be necessary, the heating plant and its operation should be examined. Such an examination so far as it relates to the regulation of radiators and the opening of windows, can be made by the superintendent. An examination of the quantity of water evaporated, the quantity of condensed steam and its temperature returning to the boiler, in most cases, would require the assistance of an experienced heating engineer. It was discovered in one hospital, where an excessive quantity of coal was used, that

the windows were all opened at night, with a full head of steam on in the radiators. Naturally coal was wasted. A superintendent could have discovered that source of waste, but did not. It was found out by an examining engineer. Nurses not infrequently adjust the heat at night to their own comfort. The wards are often kept too warm. In one hospital where this was the case, the nurse's desk was removed from the ward into the corridor, which could be kept warm with little expenditure of heat.

Every effort should be made by the superintendent to assure himself that, in the process of firing the boilers, no heat is wasted by defective insulation, by trapped lines, or by the manner of use of heat in the hospital.

The purchase of supplies is usually carefully guarded by hospitals, but even in this function, some improvement possibly can be made. If it be assumed that the best prices are being secured, attention can be given to the grades and quantities purchased. Usually fresh or held eggs are bought as needed. Eggs preserved in water glass are palatable and are suitable for many uses in a hospital. Fresh eggs can be purchased in April, and packed by the hospital in water glass at a marked saving. Butter can be purchased in June and placed in a commercial cold storage in quantities sufficient to last from September to May. Some hospitals may find it advantageous to rechurn the butter with a portion of milk to increase the bulk. Hospitals which have been purchasing meat by the cut, might find it feasible to readjust their dietaries so that the entire meat of quarters could be utilized. Where this can be done, marked economies can be secured. Some of the best hospitals, before the high prices of meat, discontinued the use of broths as of little benefit, resulting in considerable saving.

The necessity of furnishing food that patients will eat with relish is, of course, of great importance. Appetizing qualities of food, however, lie more in the cooking than in the kind. The scarcity of food during the war has demonstrated the practicability of dietaries heretofore considered unsatisfactory. Much less meat was used, not only without detriment, but with benefit to the patient and employees. Physicians will endorse an effort on the part of the hospital to increase the use of vegetables. Since hospital cooks find meat more readily prepared and cooked, it is not easy to secure the proper cooking of vegetables. If continued attention be given to this substitution by the dietitian or superintendent, not only will a more beneficial diet be produced but the food cost will be reduced.

Conservation of food can be secured by proper cooking, by serving while hot, by the privilege of selection on the part of the patient or employee, and by the classification of the waste. Too much emphasis cannot be laid on each of these four factors. Well-paid cooks and dietitians will be most likely to secure the first. Hot food can be served either from reheating tables or from heated trucks direct from the kitchen. The selection can be offered very readily when the food is taken direct from the kitchen to the ward by heated trucks. If a patient can choose what of a given variety of food he wishes, and the quantity, the waste will be greatly reduced. For employees and up-patients, such as tuberculous, the privilege of selection can best be provided by means of a cafeteria. This form of service is no longer an experiment. It has proved practicable and economical in a number of hospitals.

The conservation of hospital supplies other than food is a problem by itself. A proper condemnation system is indispensable. The use of no article should be discontinued until passed upon by some one high in authority. Moreover, the number of articles of a given kind in use at one time for every division should be definitely established, so that each division will be properly equipped and the rate of discard noted and regulated.

The use of gauze can be readily abused even by the best-intentioned house staff and attending physicians. The type of surgical dressing used and the redressing after an examination can be better regulated than is now the custom in many hospitals. Long windings are waseful if used where pads are serviceable. Redressing before the visit of an attending physician and then slitting of the redressing for an examination, necessitating a second dressing, is too frequent. Attention to these matters may save much in gauze cost.

A one-page chart in connection with each medical record to show at a glance the speed with which a patient has been diagnosed is effective in reducing the average stay of a patient in the hospital. A shortened stay means less cost to the hospital. This chart should show the distribution diagnosis of the receiving physician, the diagnosis of the house-man, the provisional diagnosis or diagnoses of the attending physician with the laboratory determinations requested, and the final diagnosis. The day and hour of each step should be recorded. With this chart sent to the superintendent's office, work is speeded up and accuracy increased.

The foregoing are only illustrations of the possible sources of increasing economy. All functions of the hospital will warrant a careful and thorough examination to discover lost motion and

waste of materials. Hospitals differing in function and construction will naturally require each its own standard. It is important, however, to determine for each the standard of service and of materials. There has been no time in which such studies have been more imperative than they are at present. The high cost of service and supplies is likely to continue for some time, and it may be exceedingly difficult to increase the income to correspond to the added cost of operation. Increased efficiency seems to be necessary to make ends meet.

HENRY C. WRIGHT.

How to Prevent a Fuss

Newspapers refer now and again, often with jest, to the tired business man. They have discovered that the business man, as well as the laboring man, gets tired. While the abbreviations T.B.M. are common, however, we do not remember having seen any one refer to the T.P.M.—the tired professional man—though it is to be assumed that as a human being working for his bread, he too gets tired.

When a man is tired or hungry, he is of uncertain temper, usually not of an admirable sort. He loses his sense of proportion and perspective. Molehills are mountains, details are principles to fight for. A little blunder which ought to pass without notice is to the tired man immediately a matter of vast importance. Tired and hungry, impatient and irritable, he sometimes gives vent to an petulant impulse; hasty words follow, and a fuss begins.

It is an unpleasant thing—a fuss—not serious as a rule, yet seriously disturbing to the hospital. Fusses resemble sparks from a locomotive. They fall to the ground and burn themselves out; sometimes, however, fanned by a little breeze, they start a fire in the underbrush which does damage.

The wise superintendent does not forget that his staff members work for their bread. He knows that a busy doctor often comes to the hospital tired, sometimes very tired, for hospital routine is an exacting routine. This is the man who easily stirs up a fuss and who should interest the superintendent. The ounce of prevention is as valuable in the prevention of fusses as of disease. The wise superintendent knows this and acts accordingly. Every once in a while he will single such a man out and say, "See here, Doctor, you are going a pretty hard pace. You look tired, and you are tired. Let me ask you to take a rest. Let someone else carry the burden for a week or two. It will do them good and do you good." In other words, the superintendent applies his ounce of prevention. At another time, about noon, he will manage to meet the man who has probably had a early breakfast and a hard morning's work and say to that man, "Doctor, lunch with me today. The price is that there be no shop talk. I want to know *you*." By utilizing such points of contact and exercising his personality, the wise superintendent keeps a sensitive finger on the pulse of his institution and makes an early diagnosis in the matter of incipient fusses.

Unfortunately, at scattered intervals, a professional fuss-maker appears. He is the man or woman unhappy without participation in a fuss. Often he is an important cog in the mechanism of the hospital. The hospital needs him. But what are we to do with the professional fuss-maker? A radical operation is really the only answer.

The only course left to a hospital with a professional fuss-maker in its organization is to eliminate him. It's better for the hospital to be hurt externally once in a while than to suffer internally all of the time. If, on occasion, the professional fuss-maker is dealt with summarily, the amateur will observe the treatment and devise his own preventive. Of all institutions in the world, hospitals are the least fitted for fussing. Meanwhile, patience, kindliness, and watchfulness on the part of the superintendent will do much for the success of fuss prevention.

Variability of the Air

In determining the kind of air best adapted to sick-rooms there has been confusion along several far-reaching lines. The first is confusion between temperature and humidity. People feel cold on a zero day even with the thermometer at 70° F. indoors, whereas on an autumn day with a temperature of 65° they often sit beside the open window and feel perfectly comfortable. The reason is that the winter air, when heated, has a relative humidity of perhaps 15 per cent, and evaporation from the skin is so rapid that it is almost impossible to keep warm. The autumn day, on the contrary, has a relative humidity of perhaps 75 per cent. Hence there is little evaporation, and the skin feels warm and comfortable.

A second line of confusion relates to humidity alone without reference to temperature. At all seasons people are apt to confuse the effect of humidity in the air and of moisture condensed on the clothing or skin. The water vapor in the air, which is imperceptible to sight or touch except that it makes the air feel "soft," is usually beneficial except at high temperatures. Condensed water vapor, on the other hand, whether the water be in the form of droplets of fog, or of a

perceptible wetness or clamminess of the clothing, bedding, walls, or skin, is usually harmful because it gives a chilly feeling.

A third line of confusion is between variability of temperature which commonly accompanies direct ventilation, and drafts. Many people recognize that the outside air possesses a most valuable tonic quality, but say that they can not stand even a slight draft blowing in from an open window. The enthusiast for ventilation insists on open windows; the delicate sufferer from colds or from age insists that he, or more often she will catch her death of cold, and so has her way. Both are right, for although outside air is good, most of us have lived so long under artificial conditions that drafts are likely to lead to chills.

In view of these facts the modern hospital physician is confronted by three great necessities. First, he must keep the temperature comparatively low, averaging not far from 65° F., but he must not let it feel cold. Second, for this reason and still more because moist air is good for the human system, he must install a humifying system which will keep the relative humidity up to 50, 60 or even 70 per cent when the temperature is 65°, but which will not be so erratic that condensation will take place. Third, he must regulate the ventilation system so that the temperature of the air will vary frequently and there will be abundant movement, but yet so that there will be no perceptible drafts. In a previous number we have discussed the first two points, but they may well be urged once more on our readers. The third point needs further discussion.

Recent experiments indicate that our old ideas of ventilation are quite wrong. We do not need ventilation because of the exhaustion of the oxygen in the air, or the accumulation of carbon dioxide, for even in the Black Hole at Calcutta it is doubtful whether those two processes had gone far enough to kill the British soldiers. Probably one of the chief reasons for ventilation is that certain toxic substances are given off in the breath, and these may act as poisons, thus leading to discomfort, sickness, and finally death, although this is not yet certain. Constant, though slow movement of the air is probably essential in order to carry away such toxins. There is also another and, under normal conditions, equally important element involved, namely, variability.

Turn for a moment to the outside air. No one doubts its efficacy. In our best hospitals we go to no end of trouble to get our patients out of doors. Why is the outer air so efficacious? And why do we get such poor results when we take the same air and after freeing it from dust carefully pour it into our wards in a full and steady stream? The experiment has been tried time and again, and the result is invariably less satisfactory than ordinary outside air, even when that has to be let in through the windows. When the New York Ventilation Commission tested such an ideal system of ventilation in comparison with window ventilation where the element of drafts was removed, it found that among several thousand children those in the rooms with the "ideal" ventilation had 136 per cent more colds and other minor respiratory diseases than had the others, and 30 per cent more absences due to respiratory diseases. Certainly the freeing of the air from dust cannot cause more colds. Nor can the quantity and movement of air in the two cases make any appreciable difference. Why then so great a difference between outside air and "ideal" inside air?

The answer seems to be variability. Suppose one is living out of doors. On a clear day the temperature changes constantly in its rise from morning to noon or later, and in its fall the rest of the day. Each cloud that sweeps across the sun brings a temporary change of several degrees; each little breeze makes the air feel cooler; you move into the shade or the sun gets around the corner, and again there is a change. Even on a still summer day the number of changes experienced out of doors runs into dozens. If you doubt the stimulus of such changes, which no sane man does, put your head out of the window some day when your windows all have been shut, and see how much more eagerly you attack your work after a few minutes of outside air. On the other hand, take a series of days when the temperature remains the same day and night, as it sometimes does in damp weather. The dampness itself may be beneficial, but the total effect is bad. The measured work on factory operatives show that they unconsciously, work slowly when the temperature remains the same day after day.

Our modern system has been based on the false assumption that uniformity is desirable. We must go back to Nature's ways, for man's evolution during untold millions of years was always outdoors, and so continued for hundreds of thousands of years after he became man instead of beast. How foolish of us to suppose that we can suddenly change an adaptation which is the fruit of millions of years of evolution. Hence our aim should be to make the air in our hospitals and houses exactly like the best outside air—like that of the days when we bubble over with joy because spring has come, or of the glorious autumn days when we say the air is like wine.

Of course it is not easy to accomplish all this, but an important step can be taken at slight ex-

pense in every hospital at once. That step is to provide the base of every window with a ventilator in the shape of a board or glass so fitted that the window can be opened a few inches without creating a draft. In addition large numbers of screens should be provided so that every patient can be well screened from drafts. Then insist that the nurses open the windows at regular intervals no matter whether the rooms are getting too warm or not. It is equally necessary to insist that the nurses watch the patients with great care to see that none are subject to drafts and that none are chilled. Also the heating apparatus must be so regulated that it responds to the extra call when the rooms are cooled, for the danger of keeping the rooms too cool must of course be avoided. What the patients need is the stimulus of a brief cool spell, like a mild, cold bath, or like a cloud passing over the sun on an autumn day. If such an autumn day is taken as a model, and if the nurses are taught that air is just as important as food, the winter harvest of deaths can be greatly reduced.

Army Rank for Nurses and Band Leaders

A certain amount of rather natural misunderstanding has arisen in regard to the bill, now pending before the Senate committee on military affairs, to give relative military rank to army nurses. A part of this misunderstanding arises from the erroneous belief that the bill is an effort to obtain increased pay for army nurses—that it is an attempt to improve the position of nurses rather than an attempt to improve the service. The other part of the misunderstanding arises from the failure of the civilian mind to realize the almost omnipotent sway of rank in the army. That an orderly can with impunity compromise the chances of recovery of a ward full of patients by defying or disregarding the orders of the nurse in charge is a state of affairs almost inconceivable by the non-military mind. Yet nurses back from the service report repeated instances in which the efficiency of military hospitals has been hampered by the fact that, without rank, knowledge, experience, and ability are negligible factors in army life.

It should be generally and thoroughly understood that the Jones-Raker bill asks for nothing in behalf of the members of the Army Nurse Corps, except what is necessary to enable them to serve their patients efficiently. Meanwhile, it is interesting to note General March has informed the Senate committee on military affairs that among the army needs for efficiency is rank (not relative but absolute) for military band leaders!

A Beautiful Memorial Hospital

The plans of the Blodgett Memorial Hospital, published in this issue in connection with the article by Miss Christine M. Hendrie, present many features of unusual excellence. Criticism is forced to content itself with a few minor details.

It is doubtful if the location of the surgical dressing room among the private rooms is desirable. One or more sound-proof labor rooms in the maternity section would be helpful. One service room in the middle of a building as long as this one will necessitate carrying bed utensils and soiled linen a considerable distance. It might be preferable not to have the elevator doors open on the public corridors, for the noise of opening doors is annoying to patients. It has often been found more convenient where there are two or more elevators, to place them in a bank or side by side.

The beauty, quality and completeness of the building are, however, the salient points of interest. In particular, the loggias are most attractive features.

The Modern Hospital's New Managing Editor

Next month will see THE MODERN HOSPITAL in charge of a new managing editor. Mr. J. J. Weber, previously associate director of the Boston Dispensary and Eastern editorial representative of THE MODERN HOSPITAL, succeeds the undersigned.

Mr. Weber's training and experience have given him an exceptional equipment for this work. He is a graduate of Hamilton College, from which he holds the degrees of B.A. and M.A. Later he graduated from the New York School of Philanthropy, and became director of the Civic Association of Englewood, N. J., a position which he left to take that of financial secretary of the Charity Organization Society of New York. Later he became connected with the New York State Charities Aid Association. As secretary of the committee on hospitals of that association Mr. Weber was largely responsible for much important work, including community surveys of hospitals in Westchester and Washington Counties, New York, to aid in the increase of hospital facilities, an extensive study of the facilities in general hospitals and dispensaries of New York State outside of New York City for the diagnosis and treatment of venereal diseases, and a critical study of plans of various new hospitals in New York City, and elsewhere. His energy and experience will doubtless extend the field of usefulness of THE MODERN HOSPITAL, through many years of the future.

MARY KATHERINE CHAPIN.

Fig. 1. Hotel Dieu de St. Joseph, Montreal.

AN HISTORIC HOSPITAL OF OLD MONTREAL

Reminiscent of the Days of French Indian Warfare and Widespread Massacre—Early History a Continual Struggle for Existence—Splendid Spirit of Sturdy Foundress Still Survives

At the foot of Mount Royal, looking out over the older, eastern part of the city, stands the Hôtel-Dieu Hospital of Montreal. Firmly woven into the heroic annals of Canada is this old and picturesque institution which figured so prominently in those first days of Indian massacre and terrorism, while bright on the pages of history shines the name of Mlle. Jean Mance, its foundress, the Florence Nightingale of Canada. No story of the country is complete which does not speak extensively of her and her miraculous work.

Mlle. Mance belonged to one of the most honorable families of Nogent-le-Roi, many of whom had been ennobled by the sovereign. Her inheritance from this distinguished family was a striking combination of great piety, devotion, and enthusiasm, a possession which proved of inestimable value to her in later years. Her distinguished grace and bearing bespoke her a gentlewoman, and her portrait, which hangs in the corridor at the hospital entrance, has been thus described:

"The face is long and delicate, with fine and regular features, clear, large, dark eyes, long straight nose, curly hair escaping from the closely fitting cap, and a dimpled chin. A short, scant cape is pinned around the shoulders, and the face, looking downward, has a pensive expression that reminds the spectator of the famous Cenci portrait in the Barberini Palace at Rome."[1]

Although deeply religious, she felt no vocation for the cloister, yet she lived the life of a nun in the world. She knew little of the New World or of the proposed new colony at Montreal, but, fired by the enthusiasm aroused through *The Jesuit Relations*, and stirred by the example of the splendid and devoted women who had founded the little hospital of Quebec in the wilderness, she suddenly decided that her life work lay in the following of their footsteps into a like, perilous venture. At the age of thirty-four, following the direction of the divine will, she went to Paris, consulted certain priests, and was introduced to many ladies of wealth and piety who supplied her with the necessary money to carry out her project. With a pledge from one of them, Madame de Bullion, that she would later establish at Montreal a hospital similar to the one just founded at Quebec, she finally left for Rochelle, the point from which ships sailed for Canada.

In the meantime the events in which she was to play so important a part had been shaping themselves in a manner nothing short of miraculous. While at his devotions one day, Jerome de la Dauversière, taxgatherer in the little town of La Flèche on the Loire, was visited by a vision which bade him found a new order of hospital nuns and establish a hospital on the island called Montreal in Canada. Far off, in another part of France, a young priest named Jean Jacques Olier, was also visited by a vision which directed him to form a society of priests and establish them on an island called Montreal in Canada. Hundreds of miles separated were these two men, neither of them knowing of the other's existence—yet history tells us that "while both were totally ignorant of Canadian geography, they suddenly found themselves in possession, they knew not how, of the most exact details concerning Montreal, its size, shape, situation, soil, climate, and productions."[2]

In a strange way these two men were guided to a meeting in which they both knew and understood each other at once, though they had never met before, and, in the belief that the voice of God had commanded them, they immediately laid plans to set forth on their venture. In planting the banner of the King in the far-off, desolate wilderness, they decided to establish three communities—one of priests to manage the affairs of the colony, one of nuns to teach the faith to the people (both red and white), and one of Sisters to nurse the sick. After enlisting the interest of wealthy and devoted friends, they formed a company called the Association of Montreal and obtained control of the island, after which they secured the brave and good Chomedy de Maissonneuve as leader for their enterprise.

Again the miraculous happened. As he was leaving the church in Rochelle one morning after devotions, de la Dauversière met Mlle. Mance. Never before had they seen or heard of each other, yet in a short moment each understood the thought and purpose of the other perfectly. At once Mlle. Mance saw in the scheme of de la Dauversière the opportunity for which she longed, and she committed

1 Maids and Matrons of New France by Mary Sifton Pepper, George N. Morang & Co., Toronto, 1902, p. 152.

2 The Jesuits in North America, by Francis Parkman, vol. II, p. 6.

herself unhesitatingly to share in his undertaking. In her he found the woman for whom he had been searching —an intelligent, courageous, and devoted soul who could act as nurse and housekeeper for the entire company.

The ships were launched at once, and after a three-months' hazardous journey, reached Quebec in August, 1641. The winter was spent at Quebec under the shelter of the little hospital colony established at that point, and the following spring the brave little group made the eleven days' trip to Montreal. Parkman[3] tells the story of their landing in this most vivid description: "Maissonneuve sprang ashore and fell on his knees. His followers imitated his example, and all joined their voices in enthusiastic songs of thanksgiving. Tents, baggage, arms and stores were landed. An altar was raised on a pleasant spot near at hand . . . Now all the company gathered before the shrine . . . They kneeled in reverent

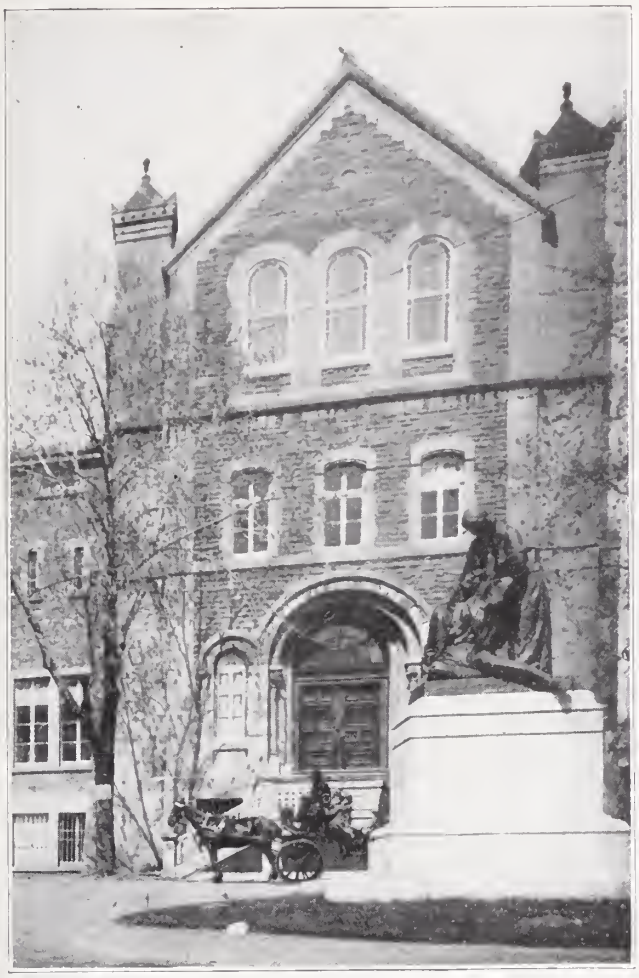


Fig. 2. Jeanne Mance still guards the portals as in the days of old.

silence as the Host was raised aloft; and, when the rite was over, the priest turned and addressed them: 'You are a grain of mustard-seed that shall rise and grow till its branches overshadow the earth. You are few, but your work is the work of God. His smile is on you, and your children shall fill the land.' The afternoon waned; the sun sank behind the western forest, and twilight came on. Fireflies were twinkling over the darkened meadow. They caught them, tied them with threads into shining festoons, and hung them before the altar, where the Host remained exposed. Then they pitched their tents, lighted their bivouac fires, stationed their guards, and lay down to rest. Such was the birthnight of Montreal. Is this true history or a romance of Christian chivalry?

Many months passed. The canvas tents were replaced by wooden buildings protected by palisades, and reinforcements for the little group came from France, bringing with them a fulfillment from Mme. de Bullion of her promise to provide means for building a hospital. After a time the Iroquois, wandering restlessly over their territory, discovered the tiny French settlement, after which all hope of safety departed from their midst. Attack followed attack, and the enemy harassed them continually. The poor little group lived in constant terror of this scourge of the wilderness, going and returning to their work in a body, armed, and placing their households under the protection of the saints. With the onslaught of the Indians it was found necessary to begin construction on the hospital at once, and accordingly the colony put aside the important work of tilling the soil and set about the equally important task of providing a shelter for those of its numbers who were daily falling victims to the ever-increasing attacks.

On the eighth of October, 1644, the hospital was completed and surrounded by palisades and Mlle. Mance established therein. Dedicated to St. Joseph, the hospital was to "entertain, nourish, and 'medicamenter' the poor sick people of the country and instruct them in all things necessary to their well-being."[4] It was a wooden building, 60 feet long and 24 feet wide, of "axe-hewn beams, the crevices filled with mud, the roof of slabs, containing two large wards for patients, a kitchen, rooms for Mlle. Mance and

Fig. 3. Jeanne Mance monument, Montreal.

for the servants."[5] Linen, medicines, surgical instruments, and other necessities were supplied from France,

[3] Parkman, Francis: The Jesuits in North America, II, pp. 24-25.

[4] A History of Nursing, Nutting and Dock, p. 391.

[5] "A Canadian Hospital of the Seventeenth Century," Dr. McCrae, The Montreal Medical Journal, July, 1906, p. 461.

and the chapel was furnished with carpets, chandeliers, crosses, and ornaments. Two oxen, three cows, and twenty sheep completed the outfit. Only one factor usually considered necessary in the administration of a hospital was lacking—and he was to be found nowhere in the colony—a physician. True, a few of the priests had a slight knowledge of medicine. Mlle. Mance had none whatever. In her capacity as directress she had but sound sense, excellent judgment, and wise sympathy to guide her—a combination which proved invaluable in meeting the repeated attacks of the savage neighbors. Many times the wards of the little hospital could not contain all the injured and dying who were brought to it, and the corridor was temporarily converted into a ward. In the intervals between incursions the colonists returned good for evil by feeding and lodging the Indians in the hospital. Often when a party went to war Mlle. Mance and her helpers took the women and children in charge till their return.

In the call for further funds which followed this generous hospitality, Mme. de Bullion presented the hospital with 24,000 pounds, under the condition that Mlle. Mance should remain directress and be fed and lodged at the hospital till her death, after which there should be established an order of sisters who would serve the poor free of charge. And an able administrator she proved, not only of the hospital, but of the many affairs of the colony. Time after time, when she saw that France languished in her interest in the settlement, she made dangerous trips across the ocean to arouse new enthusiasm. When the continued incursions of the Indians depleted the little band, she brought back more settlers and soldiers to increase their numbers. When additional nursing help was needed, her efforts secured three nursing sisters of the order of St. Joseph de la Flêche. For years she worked unceasingly in the face of almost insurmountable obstacles. The sisters—and the little colony, also—were desperately poor, lived in constant fear of death, and were terribly disheartened through dread of the unconquerable Iroquois. As their needs grew greater, money and supplies came in less frequently, for interest in the colony gradually waned. The years were a story of suffering. When the robes of the sisters wore out, they cheerfully patched them with any material available until it was finally impossible to tell of which material the habits were originally made. The room in which they lived was unfit for human habitation. Snow drifted in through more than two hundred chinks in the wall, and the first occupation of the nuns after prayers each morning was to shovel out the snow, not only from their rooms, but from the wards as well. Their very food froze on the tables and had to be thawed out before the fire.

Under such terrible and disheartening conditions, Mlle. Mance remained steadfastly at her post, toiling incessantly and exercising a prudent judgment in settling the many complications which continually confronted her. She was the mainstay of the entire colony, strengthening, supporting and developing it through her wonderful spirit and indefatigable energy. By the end of the century the affairs of the community were on a comparatively stable basis, and the early stormy years passed into calmer ones as the little colony grew in numbers. The sisters were thirty instead of the original three, and there were new and greatly enlarged buildings. Always a primal force and power in the community, the hospital had now become part of its very life, and the charity which had begun in private hands was now partly maintained by the French government.

The story of the next two hundred years is one of continued growth and tireless work in the interests of the sick and the general welfare of the colony. When a frightful pestilence, brought back by the soldiers, spread throughout the colony, patients filled the wards, the hall, and the chapel, until finally the sisters gave up their own dormitory and nursed them with energy and devotion almost superhuman.

With the conquest of Canada by the English and the revolution in France, all hospital incomes ceased, and the sisters were reduced to poverty. In the moment of dire distress one of the nuns opened a bakery and soon turned out hundreds of loaves daily, the sale of which provided a source of comfortable income. For thirty years Sister le Pailleur operated her bakery. Later she started a new industry—that of soapmaking—which grew to such proportions that a considerable revenue was raised for the hospital.

So the work of these self-denying sisters of St. Joseph continued—and has continued down to the present day. The unflinching spirit of the early years has lived on, and today it still fills the modern structure which stands at the foot of Mount Royal, a blessing to the city of Montreal. The present hospital holds about two hundred and eighty patients, nursed by one hundred "professed" sisters. Mlle. Mance herself never took the veil believing that she could do a bigger work for the colony if she were unhampered by religious vows. She died in June, 1673, at the age of sixty-seven years, and her body lies in the church which adjoins the institution, while her spirit still inspires the patient sisters who have consecrated their lives to the nursing of God's sick.

THE OPPORTUNITY SCHOOL AT DENVER

An Institution Which Makes Useful Citizens Out of Educational Derelicts—Work Limited by Lack of Space and Equipment—Not All Classes Meet Requirements of Federal Aid

The Opportunity School at Denver is just what its name implies—a place where those who have been on the educational scrap heap, in a manner of speaking, may take a fresh start and prepare themselves for profitable employment.

"This remarkable institution," says F. Cushman, Federal agent for industrial education, in an article in the *Vocational Summary*, "has more than 2,500 pupils enrolled in the day and evening classes. A very large proportion of the work is vocational, but, because of limitations of space and equipment, many lines of work for which there is a great demand cannot be taught. Miss Emily Griffith is principal.

As a result of the work in the citizenship classes, more than eighteen hundred students have been given an insight into the duties of citizenship and are now naturalized and valuable members of the community.

The watchword is, "What do you want to make of yourself?" The policy with mature men and women is, "No questions asked." If the first thing necessary on entrance to this school is a substantial meal, the meal is furnished. Some of those studying trades are given instruction at their place of employment, the foreman being the instructor. Some of the classes have been approved for Federal aid, but many have not. The foremost idea is to help the largest number of people even if it must be done without Federal aid.

THE TWENTY-FIRST ANNUAL CONVENTION OF THE AMERICAN HOSPITAL ASSOCIATION

Distinct Reaction from War-Time Responsibility Keynote of Meeting—Serious Reconstruction Problems in Hospital Field Tackled in Spirit of Determination—Joint Sessions of American Hospital Association and American Hospital Conference a Forward Step Toward Goal of Standardization

A DISTINCT spirit of relief from war-time burdens and responsibilities pervaded and colored the deliberations of the Twenty-first Annual Convention of the American Hospital Association—a spirit which was almost one of exuberance. Members of the Association who have been attending its conventions during the war period, especially those who were present at last year's meeting, easily caught the change in spirit. It was, however, a spirit tempered by a realization that the end of the war, far from bringing with it smooth sailing for the hospitals, had given rise to grave problems that had to be faced and solved —solved correctly—if the hospitals were to go forward with their reconstruction program. The convention was keenly conscious of the critical labor problems which the hospitals are facing, and which are seriously hampering their activities, impairing their efficiency and arresting their normal growth. As a step in the solution of this problem, the convention adopted a resolution calling on the President of the United States to include a representative of American hospitals, who employ upward of four hundred thousand persons, at the Conference of Capital and Labor to be held in Washington early in October.

The convention, moreover, was not unmindful of the serious situation involved in the great shortage of nurses at the training schools throughout the country.

Recognized leaders in the nursing profession feel that the fundamental difficulty lies in the lack of funds for the establishment of training schools on a sound and rational educational basis, similar to that found in other educational institutions. They called upon communities to meet their responsibilities through endowment or appropriation of public funds toward nurses' training schools and by making the fullest use of their present facilities in meeting the needs of nursing education. Only if this is done will it be possible to offset better opportunities offered in other lines of work.

But in spite of these and other handicaps under which the hospitals are laboring, the convention showed a sincere determination to tackle the problem of reconstruction in the hospital field in a big, broad, fundamental way. "The health program of this country will not merely be amended; it will be entirely rewritten and in the near future," said Dr. Warner in his presidential address. "The common problem is to provide better health for all the people and reduce the number of unnecessary and untimely deaths." The delegates were clearly out of sympathy, if not strongly antagonistic, to all partial or half-way measures which war-time conditions had often made imperative. They felt, and did not hesitate to say, that now, if ever, the hospitals of America must face, grapple with, and solve the big questions that will place them in a position to play their rightful part in solving the national health problems facing us. What many of these problems are and how they may be solved the great war has clearly shown. The convention summoned the hospitals to gird their loins and take an enthusiastic, intelligent, efficient part in the great game of public health.

It called upon them, for example, to take a prominent and telling part in the health insurance movement, which, it was predicted, would come even more rapidly than workmen's compensation came.

Lest they be caught unprepared, as they were when the latter movement swept the country, the hospitals of the United States were urged to awake from their indifference and take an active part in shaping the legislative acts which are fast coming to the point of enactment in many states. They should do this, both in their own interest and in order to contribute their experience toward making the proposed legislation as perfect as possible.

Hospitals were called upon to get into closer relation with the communities they serve. The closer this relationship becomes, the more efficient they themselves will be. They should cooperate actively with the local health authorities and with all agencies and institutions working in the interest of the public health.

Heretofore the American Hospital Association has in large measure been content to limit its activities to its annual conventions. Discussions, except as they might influence individuals here and there, were regarded as ends in themselves. The Twenty-first Convention, however, went far toward getting away from this attitude and its inhibiting influence. Instruments are in the making which will enable the American Hospital As-

sociation to wield a practical, constructive, concretely helpful influence in the hospital field. Already, the convention learned, a Bureau on Dispensaries and the Community Relations of Hospitals has been inaugurated and is being organized. This will bring to the hospitals and dispensaries of the country who feel the need of help in the solution of such of their problems as fall within the province of this bureau, the practical assistance of the Association functioning through this bureau. Institutional members will receive this assistance without charge except where traveling is involved, when the hospital or dispensary will be expected to pay the traveling and clerical expenses of the bureau's representative. A legislative bureau and other service bureaus were discussed. A number of these bureaus will undoubtedly be organized in the near future, all with a view to making the Association an increasingly helpful agency to the individual hospitals and dispensaries forming the membership, as well as to local communities that are seeking to realize their vision in practical attainment.

Another striking evidence which the American Hospital Association gave of its desire to see the things it has been talking about convention after convention realized was its enthusiastic reception of the announcement that plans had been completed for the opening of a course in hospital administration this fall at the University of Cincinnati. If hospitals are to be brought up to, and maintained on, a high level of efficiency, they must be administered by well trained executives, and the course at the University of Cincinnati ought to go a long way in preparing men and women to become efficient hospital superintendents. The course will be along the same cooperative lines which have already made the University of Cincinnati distinctive and will be open to men and women who can qualify — business men and trained nurses as well as physicians.

The most distinctive phase of the convention and the one which augurs great things for the hospitals of the United States and Canada, was the joint meetings of the American Hospital Association and the American Hospital Conference, and the adoption of a definite plan and line of policy by the American Hospital Conference, hereafter to be known as the American Conference on Hospital Service. There was an evident spirit of cooperation on the part of all the organizations represented at this conference in their desire to better the service of the hospitals of the United States and Canada. The constitution of this new conference will be found elsewhere in this issue of THE MODERN HOSPITAL, as well as a list of its officers and a detailed account of its plans for the immediate future. It is sufficient to say here that it offers a medium through which all of the great national organizations interested in the development of our hospitals can contribute constructively to their upbuilding in the interest of the public health. Never before in the history of hospitals has any event occurred which is so pregnant with possibilities of good, and THE MODERN HOSPITAL wishes the Conference Godspeed, a long life, and an ever-widening influence.

One of the most gratifying impressions gained at the Conference was the commendable progress that is being made by the Catholic hospitals under the leadership of the Catholic Hospital Association and the Committee on Reconstruction of the National Catholic War Council. Many of the Catholic hospitals have recently organized out-patient departments in order to extend their services to the respective communities. Many have established social service departments with paid trained workers, and others would establish them, could they secure competent workers.

Unmistakably, the Catholic hospitals are linking arms with the ever increasing number of hospitals that appreciate their community responsibilities and their need of the thoroughly trained medical social worker as an aid to greater medical efficiency.

The American Dietetic Association meetings, some of whose sessions were held jointly with those of the American Hospital Association, were extremely interesting and well attended. One of the chief problems, if not the chief problem, with which the dietitian grappled was the problem of the training of dietitians. Few hospitals, it was pointed out, now offer training that enables graduates to enter hospitals and take full charge of their dietetic departments. Hospitals were therefore urged to make adequate provision for the training of dietitians, and a six months' course of practical training was advocated.

Despite the hard work done, the convention had its lighter vein, touches of wit and humor, moments of frivolity and a pervading spirit of good fellowship. There was, for instance, the dancing on Tuesday evening in the Ball Room of the Hotel Gibson. The weather was hot, to be sure, but many preferred to dance rather than sit around, think about the heat and grow steadily hotter, mentally as well as bodily. There were about two hundred and fifty at the farewell dinner Friday evening, which was a fitting climax to a week bulging with good things. The food was excellent, the after dinner speeches were enjoyable and the leadership of Will Reeves in the group singing was unique and captivating.

REPORT OF PROCEEDINGS

Tuesday, September 8, Morning

OPENING SESSION OF THE AMERICAN HOSPITAL ASSOCIATION, THE AMERICAN HOSPITAL CONFERENCE, AND THE AMERICAN DIETETIC ASSOCIATION

Rev. A. G. Lohmann, vice-chairman of the Cincinnati executive committee, of the American Hospital Association, presided at the opening meeting of the three associations and made the first address of welcome. He read a letter to the president and delegates of the American Hospital Association from Maj. Christian R. Holmes, chairman of the Cincinnati executive committee, who, being ill in a New York hospital, was unable to be present. Dr. Holmes rejoiced, in the interests of efficient hospital management and especially in the interests of the sick poor, that the position of hospital superintendent has come to be recognized as a leading profession, requiring a broad education, high moral standards, efficient business and executive ability, and power to manage successfully the patients and the personnel as well as to pacify friends and relations of the former. Unfortunately, he added, too often the superintendent who is expected to be a universal genius, was paid no more and often much less than labor requiring neither education nor more than ordinary qualifications. Major Holmes hoped that one result of the service rendered by medicine in the hospitals during the war would be elevation of the salaries of hospital superintendents to a level commensurate with that of the qualities required.

The mayor of Cincinnati, Mr. John R. Galvin, welcomed the association on behalf of the city.

The address of the president of the association, Dr. A. R. Warner, superintendent of Lakeside Hospital, Cleveland, is published in full as the leading article in this issue of THE MODERN HOSPITAL.

Dr. S. S. Goldwater, director of Mount Sinai Hospital, New York, at the close of Dr. Warner's address, introduced the following resolution asking the president to include a representative of American hospitals at the coming conference of capital and labor in Washington:

WHEREAS, the President of the United States has announced his intention of convening at Washington in the near future, a representative group of employers, employees, and other qualified persons, to consider economic problems which require to be solved in a manner compatible with justice and with the national welfare; and

WHEREAS, it is assumed that among the questions to be considered are standards of labor, immigration, and its relation to such standards, and the requirements and principles of management of the great national industries and occupations; and

WHEREAS, the flow of labor to institutions caring for the sick has recently been retarded to such an extent as seriously to impair the efficiency of such institutions and as to arrest the normal development; and

WHEREAS, the financial resources of these institutions have not been sufficiently increased during the past five years to enable them to meet additional economic pressure; therefore be it

Resolved, that these institutions which under normal conditions employ over 400,000 persons, and the maintenance of which in the healthy activity is essential to public welfare, respectfully petition the President of the United States, through the American Hospital Association, for an opportunity to present at the forthcoming conference a statement of their position, resources, and requirements, which cannot wisely or safely be disregarded in framing a national industrial program.

Tuesday, September 9, Afternoon

SECTION ON HOSPITAL ADMINISTRATION

Dr. Louis H. Burlingham, superintendent of the Barnes Hospital, St. Louis, presided.

The first paper, on "Safeguarding the Hospital Milk," by Dr. Joseph B. Howland, superintendent of the Peter Bent Brigham Hospital, Boston, is published elsewhere in this issue (p. 258). Dr. Ralph B. Seem, secretary of the section on hospital administration and assistant superintendent of the Johns Hopkins Hospital, Baltimore, who, in Dr. Howland's absence, read his paper, supplemented it by saying that skimmed milk powder had been used with considerable success at the Johns Hopkins Hospital, particularly for cooking purposes, and had been a great saving in making soups and cocoa.

Dr. A. C. Bachmeyer, superintendent of the Cincinnati General Hospital, read a paper describing a course in hospital administration to be inaugurated at the University of Cincinnati College of Medicine. Dr. Bachmeyer said that this course would not be limited to training graduate physicians.

Mr. Daniel D. Test, superintendent of the Pennsylvania Hospital, Philadelphia, expressed the hope that the University of Cincinnati would train men and women not only in the technique of hospital administration, but in the exercise of common sense and good judgment. To illustrate his point he cited the example of the response which had been made to three thousand letters sent out by Colonel Hornsby to hospital superintendents offering to give away several million yards of hospital gauze owned by the American Red Cross. Dr. Hornsby, he said, after several weeks, had received only 800 replies to the queries he had sent out asking if hospitals wished to receive this gauze without charge. Later, said Mr. Test, Dr. Hornsby sent out 2,400 more letters and received only 400 answers.

President, Dr. Joseph B. Howland, Peter Bent Brigham Hospital, Boston.

Dr. Bachmeyer was asked what his personal views regarding the training of non-medical hospital superintendents through the University course might be. He said it had been clearly demonstrated that others than medical men could run hospitals efficiently even though, as a rule, they did not have the same point of view. He said that we all knew of physicians who had made very inefficient hospital superintendents, and, on the other hand, we all knew of nurses who had made particularly good

President-Elect, Dr. Louis R. Baldwin, University Hospital, Minneapolis, Minn.

hospital superintendents. He said that one of the important objects of the course was to fit the men and women to take superintendencies in the smaller hospitals.

First Vice-President, Mr. H. E. Webster, Royal Victoria Hospital, Montreal.

which could not afford to pay the salaries rightfully demanded by trained medical superintendents. After the meeting he unofficially expressed the opinion that, as a general rule, medical superintendents ought to be selected from the larger hospitals. He was also asked in the meeting whether or not it would be probable that hospital superintendents trained in the school which he is organizing would not in many cases replace superintendnets who now hold positions in our hospitals. He did not reply to this query.

The session was very much enlivened by the showing of motion pictures as an exhibit to the paper read by Dr. H. J. Moss, superintendent of the Hebrew Hospital in Baltimore. Dr. Moss' paper was entitled "The Motion Picture as a Means to Publicity." The most interesting picture shown by Dr. Moss was one illustrating the work at his own hospital, which told the story of how the hospital helped a family in which the three members were simultaneously in trouble. The father of the family had

Second Vice-President Dr. R. G. Brodrick, San Francisco Hospital, San Francisco, Cal.

just broken his leg. The mother was expecting an addition to the family and was unable to take proper care of him. A young boy reported the family trouble to the hospital, which promptly took in the father and subsequently cared for the mother. Incidentally, as no one was left at home to take care of the youngster, he was admitted to the hospital for the removal of tonsils and adenoids. The final scene illustrated the healed and happy family returning to their home with an addition.

Dr. Moss said that the moving picture houses were all glad to exhibit this picture without charge and that a slight charge of $150 had been made to produce it.

SECTION ON OUT-PATIENT WORK

Mr. Michael M. Davis, Jr., director of the Boston Dispensary, Boston, presided at the sectional meetings.

Twenty-first Annual Convention, American Hospital Association, Cincinnati, Ohio, September 8-12, 1919
The Modern Hospital, October issue, 1919, Vol. XIII, No. 4.

Dr. Hugh Cabot, genito-urinary surgeon of the Massachusetts General Hospital, Boston, and, during the war, lieutenant-colonel in the British Army, was scheduled to speak on "Clinics for Venereal Disease," but was unable to attend. His place was taken by Major Alec Thomson, who has recently assumed the position of medical secretary of the American Social Hygiene Association. He took as his main theme the vitally important place which hospitals and dispensaries must play in the campaign against venereal disease which received such a splendid impetus during the war. Major Thomson pressed home the points that one of the biggest preventive factors in the control of venereal disease was the facilities for treatment, and that these must be provided in greater measure if the ravages of these diseases in money and lives are to be materially reduced.

It was hard to say how much venereal disease would be carried back into the communities by returning soldiers. It is the problem of the army, Major Thomson said, to make men fit to fight, and they were treated for venereal diseases with a view to making them non-infectious and without respect to whether they were completely cured. Syphilis, when caught in its primary stage, was usually cured in a military sense by six weeks of treatment. He felt, however, that many primary cases were permanently cured as a result of this brief treatment.

Third Vice-President, Miss Margaret Rogers, Jewish Hospital, St. Louis.

Major Thomson maintained the experience of the army indicated that the civil clinics have great possibilities and responsibilities ahead of them in facing this vital health problem and should come to realize the tremendous demands for treatment which will be made upon them in the near future, because of the intensive educational campaign which the American Public Health Service and the American Social Hygiene Association plan to wage. Once for all, the conspiracy of silence has been broken, and constantly increasing demands for the treatment of these diseases will be made upon our hospitals and dispensaries. Major Thomson called attention to the fact that already venereal disease signs have been installed in men's toilet rooms of Pullman cars and have stimulated thousands of inquiries to the U. S. Public Health Service.

Treasurer, Mr. Asa S. Bacon, Presbyterian Hospital, Chicago.

As a result of the new interests which have been aroused, 150 additional clinics for the treatment of venereal diseases have been established in the United States, and Major Thomson predicted that every live hospital would have to establish a clinic of this kind if it was to keep step with the march of events. Only in this way will the campaign which is now being waged be effective, for why tell the general public to secure treatment when places for treatment have not been provided?

Trustee for Three Years, Rev. Maurice F. Griffin, St. Elizabeth's Hospital, Youngstown, Ohio.

Trustee for Two Years, Dr. Andrew R. Warner, Lakeside Hospital, Cleveland.

Efficient medical social service in several venereal disease clinics for men have resulted in the development of clinics of a similar size for women. In the state of Massachusetts, under the new recording law, 12,000 cases of venereal disease have been reported. About 8,000 of these are cases of gonorrhea and 4,000 of syphilis. Major Thomson predicted that, as public health authorities delve deeper and deeper into the problem, more cases will be unearthed. He felt, moreover, that the relationship of syphilis to tuberculosis would be increasingly recognized and studied.

In France, Major Thomson said, the army tried to discover every case of venereal disease. When demobilization began, segregation camps were established near the various points of embarkation. Where venereal disease cases were discovered in France, they were detained. With a view of discovering as many cases as possible, further examination of soldiers was made on the transport and again before they were discharged. Those cases discharged as non-communicable before it had been possible to determine whether thoroughly cured were advised to go to local health departments for further observation or treatment if necessary. Where treatment facilities did not exist, discharged soldiers were urged to call this fact to the attention of the state or federal health departments.

Major Thomson stated that in 1913 there were but twenty-five or thirty clinics treating venereal diseases in the country. Now there are over two hundred clinics, but this number is wholly inadequate in the face of the great need. He said that the American Social Hygiene Association stood ready to cooperate with every organization for the establishment of adequate treatment facilities.

Mr. Davis, the chairman of the out-patient committee, stated that the committee at one of its recent meetings had come to the conclusion that the training of workers to serve as clinic executives or managers was a question of the utmost importance, since much of the success of venereal disease clinics depended upon the efficiency of these workers. These executives, he felt, need not be nurses or trained social workers but should be able to handle people.

The Rev. John O'Grady, secretary of the committee on reconstruction of the National Catholic War Council, read an extremely interesting and stimulating paper on "Out-Patient and Social Service Work in Catholic Hospitals," which will be published in a later issue of THE MODERN HOSPITAL.

SECTION ON NURSING

In opening the meeting, Miss Elizabeth Greener, superintendent of nurses, Mount Sinai Hospital, New York, the chairman, pointed out that the training schools throughout the country today are facing serious and difficult problems in connection with the education of the nurse. The causes leading to these difficulties are many. As its object, the nursing section had elected to present papers dealing with certain urgent phases of the situation, in the hope of offering a strong constructive program for the coming year.

The first paper by Miss Laura R. Logan, professor and director of the School of Nursing and Health, University of Cincinnati (Cincinnati General Hospital), had for its subject, "Readjustments Which Training School and Nursing Departments Are Facing, from the Standpoint of the University Hospital." Miss Logan indicated that these readjustments were chiefly concerned with the present shortage of graduate nurses proficient in teaching, in public health service, and in institution management, and in the shortage of desirable candidates to the schools of nursing.

To the following causes these discrepancies can be predicated: Deficiency in public health nursing ranks is the result of the very general omission of such training from the usual undergraduate preparation and the increased demands all over the country for this service. The shortage of student nurse applicants is the direct sequence of better opportunities in other fields of work under less strenuous conditions. Behind both of these causes lies the common cause, the lack of sufficient funds whereby the training school shall be established upon the same sound and rational educational basis as other educational institutions.

The nurse in every phase of her activity belongs to a professional group which is rendering a service universally considered indispensable. Upon the community, therefore, rests the responsibility of providing such endowment as will make possible the necessary and constructive changes both in the reorganization of the training school and the hospital. Miss Logan took up in detail the changes involved in such reorganization, and further urged that the public be appraised of those essentials upon which the education of the nurse is built. She suggested, wherever possible, the incorporation or privileges of the nursing school in universities, colleges, or normal schools to lend that instructional part of the nursing school curriculum so necessary to the development of the nurse of today. In closing her paper, Miss Logan gave a description of the School of Nursing Health, University of Cincinnati, Cincinnati General Hospital.

Miss Ann H. Strong's paper on "The Nursing Situation from the Public Health Point of View," read by Miss Ella Philips Crandall, was next in order. Miss Strong strongly emphasized the general and greatly increased

demand for public health nurses, the increasing consciousness that the sick should be cared for on the basis of their need rather than on their ability to pay, and the fact that the public is realizing the need for protection from disease and showing a lively interest in health education generally. Perhaps one of the most interesting and hopeful announcements given out for some time was that of Miss Strong, concerning the recent appointment of a committee, with Professor C. E. A. Winslow of the Yale School of Public Health as chairman, to conduct an investigation as to "the field of public health nursing, the functions of the public health nurse, and the existing facilities for training, including both the hospital training schools and the post-graduate courses in public health nursing." Such data should certainly give a scientific basis upon which to build an improved curriculum for public health nursing.

Pending the completion of this committee's investigation, Miss Strong points to certain defections in our present curricula of training schools as possible points of attack: the fact that from 31 to 47 calendar months, a longer period than necessary to prepare for other professions, the prescribed time for the preparation of the public health nurse, deserves careful consideration; the importance of a course in theory and practice as substantial, as is offered in other professional schools, if nursing schools are to attract college women; the necessity for shorter hours and the urgent need for definite funds other than supplied through the hospital to effect this newer nursing education.

Miss Agnes Ward, general superintendent of nurses, Department of Public Charities, New York City, outlined an interesting plan on the training of attendants, now being tried out in that department. If this scheme, at present in its experimental stage, proves successful, it should do much towards offering the solution of supplementary assistance to the nurse, whether in the hospital or in public health service.

Miss Carrie Van Der Water, Mount Vernon Hospital, Mount Vernon, N. Y., presented a paper on "Nursing Complication To Be Dealt with and Adjusted in the Small or Moderate-Sized Hospital from the Point of View of the Hospital Superintendent."

In the discussion following these four papers, Miss Mary L. Keith, Rochester, N. Y., expressed the belief that screen publicity concerning nursing schools would do much toward stimulating the number of candidates, and that the introduction of obligatory instruction in simple nursing procedures in the senior year of high school students would greatly assist in providing home nursing care where the skilled services of a trained nurse were not indicated.

Miss Sophia F. Palmer, on being asked to speak, went back to the time when the two-year course had been increased to three, because it was felt that two years was too short a period to get in all the branches of nursing essential to the making of a well-rounded nurse. But the additional two years had not brought that which had been hoped for educationally. The increased time had been given over to repetition of routine, and now some of those women best qualified to judge were beginning to feel that a return to the two-year course might be advisable. As for shortage of student nurse applicants, Miss Palmer, declared "there always had been and there probably always would be."

Miss Crandall urged, that, with the introduction of trained attendants supplementing the work of the nurse, great care be observed, so that there would not develop grades of nurses, one for the sick poor and one for the sick rich. Economy of resources would indicate a parallel service to every class of society. In Cleveland an attempt has been made to attain such an end by forming a "Community Conservation of Resources" organization.

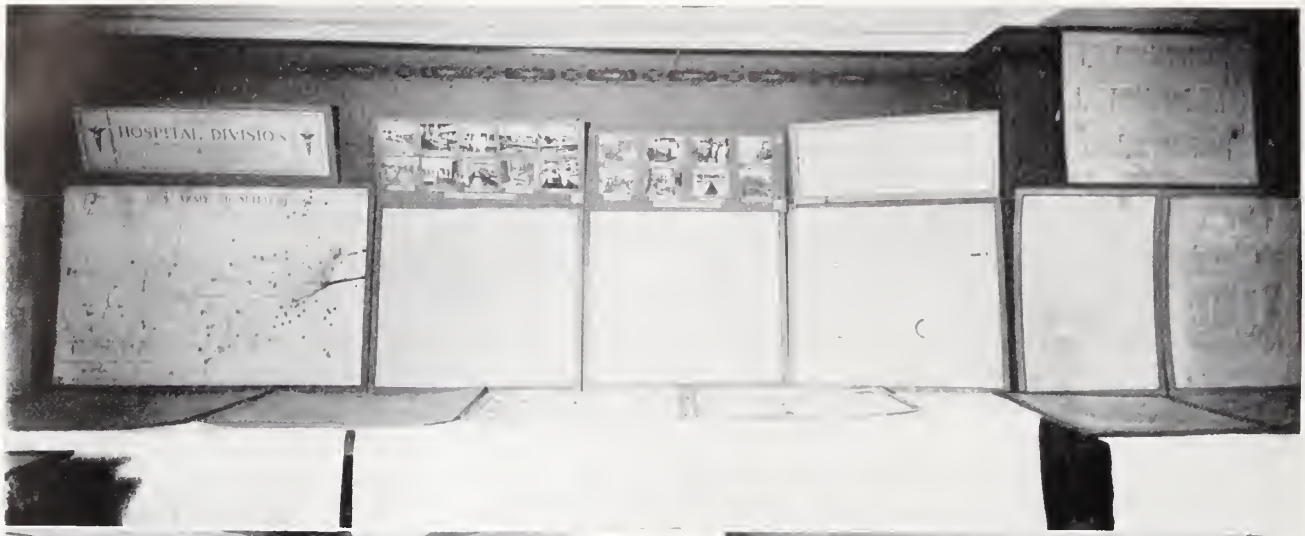
Mr. Daniel Test of Philadelphia expressed the opinion that "the people should get what they want and can pay for." If their means will allow of attendant's service only it is the obligation of society to see that such service be provided. He further stated that if the nursing profession did not meet this need other groups would.

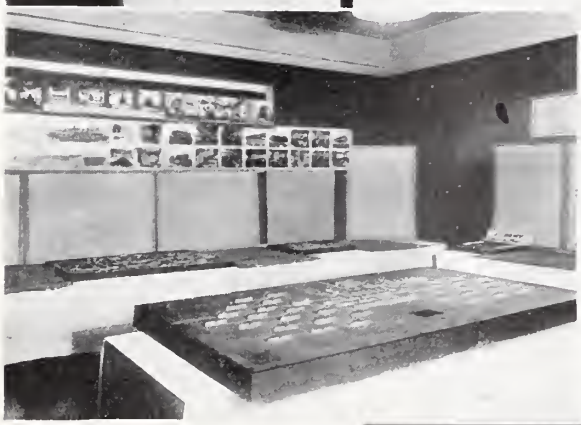
Miss Crandall replied that it is this very middle class which is giving the greatest concern. To this end the Visiting Nurse Associations were organized, so the ill patient, whether he be rich or poor, should have at least the minimum of skilled nursing care.

Dr. Parnall, medical director, University of Michigan Hospital declared that he believed the trained attendant to be a menace to the health of the public and that he was glad the various bills introduced in behalf of this type of worker had not passed their respective legislatures. The minimum requirement for entrance to a nursing school he fixed at high school graduation.

To summarize the proceedings of the meeting, the crux of the situation seems to lie in a lack of resources. The signs of the time point now, as never before, to the expediency of establishing nursing schools on an educational basis, parallel to other educational institutions. Such action would assure better teaching, better school equipment, shorter hours, and, in the end, would yield the most economic returns in the education of the student nurse and her future service as a graduate in social usefulness. In order to carry on this new scheme of nursing education, certain organization must be effected in hospital management. This reorganization would involve the employment of paid hospital helpers, so that the time of the student nurse be not utilized for routine work beyond that point in securing efficiency of technic.

Trustee for One Year, Dr. Louis H. Burlingham, Barnes Hospital, St. Louis.





Hospital executives in attendance at the Cincinnati convention —particularly those planning new buildings or extensions — were greatly interested in the architectural display held in one of the parlors on the mezzanine floor of the Hotel Gibson under the general direction of Dr. John Allan Hornsby. The exhibit consisted to a large degree of plans and photographs of architectural features in hospitals in various sections of the country. Extremely interesting and instructive were the models of army hospitals and photographs of army hospital trains illustrating the method of handling wounded soldiers in hospitals and in transit. The exhibit of plans and photographs illustrating the "cross-cut" plan of hospital construction as advanced by Mr. Asa S. Bacon, superintendent of Presbyterian Hospital, Chicago, attracted the interest and attention of the many hospital people and architects who visited them.

Given these ideal conditions or, in the beginning, only their approach, the nursing education of the future offers unlimited promise and hope.

Wednesday, September 10, Morning

JOINT GENERAL MEETING OF THE AMERICAN HOSPITAL ASSOCIATION AND THE AMERICAN HOSPITAL CONFERENCE

A great deal of interest centered in this meeting. The speakers were Dr. S. S. Goldwater, director of Mount Sinai Hospital, New York City, Dr. John M. Dodson, dean of Rush Medical College, Chicago, and Mr. John G. Bowman, executive secretary of the American College of Surgeons.

Dr. Goldwater was scheduled to speak on "The Organization and Functions of a Hospital." Feeling, however, that little was to be gained by a discussion of this subject along orthodox lines, he took the liberty of digressing from it and, by following a patient in imagination through the average hospital, sought to arrive at certain specific problems, the solution of which might be undertaken by the American Hospital Conference.

When a patient enters the hospital he brings with him certain needs. The first of these needs is that his condition should be accurately determined and recognized. This duty rests with the intern, if there be one, who, working under proper supervision, should be able to make a fairly accurate classification. Most hospitals, however, have no interns, and it should be one of the purposes of the Ameri-

can Hospital Conference to devise some scheme for providing the hospitals of the country with an adequate number of interns. This is the more necessary, as patients are frequently sent in by physicians who are not always qualified diagnosticians. Many patients seek entrance on erroneous certificates in instances where physicians have failed to use scientific precision rather than snapshot judgment. Many cases, moreover, of an obscure character call for team work. When, however, no machinery for group diagnosis is provided, there is no way of making possible that combination of talents and concentration of many kinds of knowledge necessary to solve some of the critical problems where life itself may hang in the balance.

A diagnosis once established, skilled treatment, Dr. Goldwater contended, can be carried out only through a proper assignment of functions to the various members of the staff.

The next problem is the necessity of keeping accurate records of what is done for the patient while in the hospital. The American Hospital Conference must persuade hospitals that, for a number of reasons, clinical records are important. When, for instance, because of illness or unavoidable absence, substitutes must be provided, they are unable to continue treatment intelligently except on the basis of carefully kept records. Dr. Goldwater also indicated that there were medicolegal reasons why accurate records should be kept. Not the least important reason was that the physicians themselves, the hospital superintendent, and the public might judge accurately as to the character of the work the hospital was doing.

Dr. Goldwater contended that there never would be a fixed hospital standard, as the hospital is an organization which is constantly growing. There are, however, general minimum standards which are essential for decent, effective work, and these should be speedily determined. At present hospitals cannot give adequate data to those who are struggling with some of the big problems, such as health insurance and medical organization under state supervision. He urged hospitals to study their problems more intensively and to be prepared to take their rightful part in the formulation of the broad hospital and medical programs now under consideration.

He conceded the fact that adequate service was often lacking because of want of means and that some of the reforms that were being suggested, such as the eight-hour day for hospital nurses and hospital help, could not be introduced, however much they were believed in, because hospitals were compelled, under the lash of poverty, to cling to traditional methods. This situation, however, he felt could be corrected only by facing it squarely, and frankly asking the community for relief.

Referring to the crisis in the nursing situation, he declared that fully two-thirds of the hospitals were appealing for more nurses but were unable to secure them. If the eight-hour day or a shortening of the course would bring the needed nurses, he suggested that these changes be made. He suggested that legislation to deal adequately with the training of attendants to help the nurses was essential. Six bills attempting to solve the nursing problem in six different ways had recently been introduced in state legislatures. Dr. Goldwater argued that these differences, often resulting in the clashing of personalities before legislative committees, should be resolved by some central body in order that a uniform program might be presented.

Dr. Goldwater also referred to the problem of training hospital social service workers and expressed the hope that a standardized plan of training would shortly be established.

Faced with these specific problems, Dr. Goldwater felt

The non-commercial exhibit, arranged by a special local committee under the direction of Miss Alice Thatcher, superintendent of Christ Hospital, Cincinnati, was held in room A on the mezzanine floor of the Hotel Gibson. It was one of the most attractive features of the convention and aroused great interest among all in attendance. Bethseda Hospital a very interesting section of the exhibit. Rainbow Hospital of Cleveland gave a unique display of hospital practice in miniature, which consisted of tiny beds with doll patients. The Ohio Board of Public Health supplied interesting statistical information regarding the present hospital situation of the state. These were but a few of the outstanding features of a most artistically arranged and attractive display.

that the American Hospital Conference should enter upon its work with a broader conception than that which confined hospital activities within the four walls of any given institution. The economic interests of hospitals and the growth in public health work should lead hospitals to establish closer relationships with the outside world.

Dr. John M. Dodson spoke on "Medical Education Through the Staff and Intern." He said that, while medical education was only one of its functions, the modern hospital was an essential factor in medical education. Even four years of intensive instruction is not adequate to fit men for the independent practice of medicine, and at least one year of supervised practice at the bedside is essential. But not only must the hospital fit men to practice medicine independently in the community; it must also instruct for its own good. Even after four years of instruction, students are not facile in diagnosis, and superintendents must not expect them to come in as expert interns but must train them, just as nurses and social workers are trained.

Dr. Dodson felt that nothing keeps a staff up to the mark like making it teach. He branded as fallacious the conception that only pauper patients could be used for teaching purposes. We are, he thinks, getting over the notion that patients do not like to be demonstrated over. The demand for post-graduate or polyclinic instruction which would enable practising physicians to keep in touch with the progress in their field, is not being met adequately; Dr. Dodson contended that it could be met in most hospitals by post-graduate courses which would improve the services of those hospitals from 50 to 100 per cent. He called attention to the fact that legally internship of one year in an improved hospital is required for licensure in six states. Eight medical colleges, moreover, will not give diplomas without a year's internship.

In Dr. Dodson's opinion all the functions of the hospital are so interlocked that, when one department of the hospital is improved, all departments feel that influence. The present need is to know what hospitals there are which maintain certain minimum standards and the American Hospital Conference is a logical body to take logical, feasible means of finding out what standards we now have.

Mr. John G. Bowman, director of the American College of Surgeons, spoke on "Better Professional Work Through a Better Staff and Better Records." He contended that the various associations forming the American Hospital Conference are inseparable parts of the hospital. One part, he felt, could not wisely criticise the other, but all should get together on the larger task. The American College of Surgeons attempted merely to get things started. The college, he said, was planning shortly to issue a report covering its study of 2,400 hospitals of twenty-five beds or more, including 840 general hospitals of one hundred beds or more. In this study, the college had attempted to find some basis on which the hospitals might judge where they stood. Two questions were asked the hospital: first, what are you trying to do?—and second, what one thing needs most to be done now? The one thing that stood out as a result of the inquiry as most essential was that staff meetings should be held regularly, at which, on a basis of fact, members of the staff might find out wherein they had failed. Mr. Bowman intimated that out of 840 hospitals visited personally on behalf of the college, about 175 in United States and Canada held regular staff meetings. He felt that, in order to get thoroughgoing results, it would be necessary to carry this whole matter to the chambers of commerce or other representative organizations in various communities. These organizations could be made to realize the situation in the hospitals of their respective communities without breaking the confidence which the community had in the hospitals and are in a position to see that the hospitals furnished the grade of service which the community had a right to expect.

In the discussion which followed, a representative of Cook County Hospital of Chicago stated that all of the physicians in the Cook County Hospitals were members of the teaching faculties of the various medical schools. The teaching of the intern is done in small ward talks, the students being limited to ten. These men write histories, take specimens of urine and blood, and examine the x-ray plates. They also receive instruction in history-taking and have weekly meetings. Dr. Sexton, superintendent of the Hartford Hospital, Hartford, Conn., made a plea that hospitals should appraise and standardize themselves. He also stated that two years ago the Hartford Hospital introduced the eight-hour system for their nurses and that they were constantly obliged to turn away applicants.

Mr. Barrow B. Lyons, superintendent of Delaware Hospital, Wilmington, contended that it would be difficult to realize some of the ideals set forth by the various speakers, for it was a question not only of the soundness of the ideals but of the way these ideals struck the trustees. In all advancement, funds, of course, were necessary, and these were increasingly difficult to secure because of income taxes, labor troubles, and the necessity for retrenchment. Even the inaugauration of regular staff meetings, which seemingly might be done at little expense, required funds for clerical help, for laboratories, and for competent pathologists. He said that superintendents were also hampered by the attitude of trustees who think they know more about the hospital than the superintendent does himself.

In closing the discussion, Dr. Dodson raised the question of how hospitals were to get enough interns, in view of the fact that last year all the medical schools graduated only 2,600 students, while the demand for interns exceeded 4,000. He suggested as a possible remedy that the service of interns be increased two years thereby virtually doubling the number of interns. As a means of increasing hospital efficiency, he suggested that doctors maintain their offices in, or closely adjacent to, the hospitals in which they were practising.

Wednesday, September 10, Afternoon

JOINT GENERAL MEETING OF THE AMERICAN HOSPITAL ASSOCIATION AND THE AMERICAN HOSPITAL CONFERENCE

Rev. Maurice E. Griffin, of Youngstown, Ohio, vice-president of the Catholic Hospital Association, presented a paper on "The Hospital's Service to Humanity." Following this paper one was read by Miss Sara E. Parsons, superintendent of nurses, Massachusetts General Hospital, on "The Education of the Nurse." Both these papers will be published in a later issue of THE MODERN HOSPITAL.

The last speaker was Edwin R. Embree, secretary of the Rockefeller Foundation, who spoke upon "Hospital Development from the Trustees' and Laymen's Viewpoint." Mr. Embree declared that he did not think there were many things which the laymen tried to decide about hospitals, particularly in regard to the complex technical problems which present themselves to hospital administrators. In regard to the nursing problem he said, "Even the most ignorant layman knows enough to let that buzzsaw alone." In the problems, however, in which the hospital

directly affects the welfare of the community, he said the laymen were very much interested. The layman is interested in the cure of sickness, in the training functions of hospitals (that is, in the training of interns, postgraduate medical work, training of nurses, the training of social service workers), and in community relations, particularly those which fuse the hospital with the public through the social service department. To a lesser extent, he said the layman was interested in hospitals as institutions for furthering research work for the prevention of disease and for the advancement of science. Yet more than in any of these things he felt the layman was interested—and rightly so—in having hospital service given which was adequate, geographically well distributed, and on a democratic basis. In referring to a speaker of the morning session, he said he believed it was true only in part that hospital boards were not willing to appropriate the funds necessary to meet the highest standards of hospital service. "While the hospital trustee will refuse to raise the salary of this clerk or the other, or to create a new position on account of scarcity of funds, I do not believe that the trustees will have the same point of view if the matter is presented to them from the angle of broad medical needs. The average man who gives to hospitals will respond to a real demand for adequate hospital service."

Mr. Embree then spoke of the need for less charity in hospital service. How obnoxious to a free American, he said, would be the idea of having to accept education from so-called charity schools! Must we depend upon a few wealthy persons for our hospital service any more than we do for our schooling? We must work out a more democratic scheme. Will the day not come when each man can demand adequate scientific medical service, not because he can pay for it or because he is too poor to pay for it, but simply because he is a plain American citizen?

Following Mr. Embree's address, Miss Clara D. Noyes, acting director of the National Red Cross, remarked that she did not think the possibility of cooperation between the medical and nursing profession was as distant as Miss Parsons had intimated in her address. She said, "No lesser person than Dr. Weldon, has declared that the medical profession could never have reached the plane it has today without the intelligent cooperation of the nurses." She felt that the apathy which the medical profession has shown to the nursing profession was due largely to a lack of understanding. "I do not believe many superintendents of nurses," she said, "have the privilege of laying their problems first-hand before the medical boards of their hospitals. I believe that, if the nurses would struggle to get that sort of recognition for themselves, they would be able not only to advance the standing of their profession further, but to attract to their schools a better class of nurses."

Mrs. F. Holt, of the Woman's Hospital and Infants' Home, Detroit, presented the point of view of trustees. "I am here before you," she said, "in almost a unique position. I am president of a women's board of trustees of a woman's hospital in Detroit. Our superintendent urged me, as her assistant superintendent in fact if not in name, to attend this meeting. I think that all that has been said about hospital boards of trustees has been said well. I think that boards as a rule are too often mere figureheads, but as a result of the war I believe that all of us have begun to realize very much more greatly our responsibilities on hospital boards. If hospital boards do not awake to the greater sense of their responsibilities, they must get out and let somebody else come to do their work."

Mr. Richard C. Borden, of Fall River, Mass., a trustee of the American Hospital Association, suggested that the American Hospital Association should immediately organize hospitals in preparation for another war in case it should come.

In answer to a question from the floor, Dr. Warner explained that it was the particular purpose of the American Hospital Conference to bring all of the agencies which are interested in standardizing hospitals together, in order that one plan might be worked out. He also explained the method by which hospital boards of managers were represented in the American Hospital Conference.

Answering a question as to whether or not accredited schools of nursing should train hospital attendants, Miss Noyes replied that such training would be very dangerous indeed. "There is nothing to prevent an attendant trained in an institution," she said, "from going out of that institution and saying that she was trained in it and practicing as a nurse. Until nursing becomes a licensed profession this will be very dangerous. Moreover, I don't think you will get many women who will take such training for attendants while there are training schools with standards so low that women can graduate from them and practice as a nurse without a thorough knowledge of the real elements of nursing."

Following Miss Noyes, Miss Parsons added, "When we get ready to train attendants we do not want to be satisfied with simply giving them the work of domestics to do. A trained attendant should be able to give baths well, administer simple medical directions in a trustworthy manner, cook a simple invalid diet, and even upon occasion, relieve the regular nurse. She should not be taught to do simply menial work."

Miss Goodnow of Boston called the attention of the meeting to the final report made about four years ago of a committee which was appointed by the American Hospital Association to study the problem of grading of nurses. "This was one of the most masterly productions on the subject of nursing ever got out," she said. "It was a prophetic utterance. It showed insight and good practical sense."

Wednesday, September 10, Evening

General Session

Mr. Michael M. Davis, Jr., director of the Boston Dispensary, read a paper on "Community Relationship of Hospitals." Mr. Davis declared that a hospital must be judged as a part of the community team for better health, and by its relation to outside community factors, as well as by its internal organization. Among the conditions properly demanded of hospitals are provision for treatment of contagious diseases, care of maternity cases, outpatient and social service departments, and cooperation with the medical profession and the community for better civic conditions. All of these and more Mr. Davis declared to be essential in the development of reconstruction and particularly in the success of post-war financial programs. A careful survey of the community field to see how the hospital fits into the community needs was urged. Conditions are varied and each community has its particular problems; hence the necessity for studying the specific needs of each community and the way in which the hospital may properly function.

Dr. Otto P. Geier read a paper on "Health Insurance," in which he pointed out what he considered to be vital defects of the proposed plans in this country. He characterized the pending bills in Ohio, New York, and other states as hasty and ill-advised, and urged the study of the medical and hospital phases of the proposals, so that

adequate provision would be made and the mistake of workmen's compensation acts avoided. His plea was principally for a program of sickness prevention rather than for a system of sickness indemnity, but he believed in insurance for the irreducible minimum of sickness.

Mr. John A. Lapp, editor of *Modern Medicine*, discussed Dr. Geier's paper, pointing out that all agreed on a program for prevention, but that the program of prevention should not be confused with health insurance. Sickness is constantly driving people down from higher to lower economic levels. It is to stop this decline that health insurance is proposed. Sickness is a measurable risk, and insurance is a simple business-like way to meet it. We meet many other risks that way. All businesses carry insurance of different kinds. Our experience in many fields points the way to the solution of the health insurance problem. Mr. Lapp characterized opposition to health insurance as made up principally of bogies which will be overcome in the same way that the many difficult problems of society are being met.

Mr. Pliny O. Clark, superintendent of Ohio Valley General Hospital, and chairman of the committee on legislation, characterized the report of that committee (which he said he did not write) as a masterly production and handed it over to be read by its author, Mr. Howell Wright, secretary of the committee on legislation. This report, which is presented in full elsewhere in this issue, is of vital importance to hospital people.

Thursday, September 11, Morning

SECTION ON SOCIAL SERVICE

Mr. John E. Ransom, director of the Central Free Dispensary, Chicago, read a paper on "Training for Social Service," which will be published in full in a later issue of THE MODERN HOSPITAL.

Dr. Charles E. Emerson, dean of the University of Indiana School of Medicine, read a paper on "Social Service and the Medicine of the Future." What, he asked, is the medical social service of the future? Social service too often has to earn its right to exist by doing, not the work which properly belongs to it, but the work which boards, doctors, and nurses allow it to do. Too often it exists to make good the shortcomings of other departments of the hospital. Social service, Dr. Emerson said, has done splendid work in humanizing the hospital, but the hospital should be human anyway. It should not be the province of social service to remedy the faults of a staff member who speaks and thinks of patients as cattle, for such a man should be reformed. The true province of social service Dr. Emerson illustrated by reference to four classes of cases of stomach troubles, all with superficially the same group of symptoms and all of which, twenty years ago, would have been treated in precisely the same way. Today refined methods of diagnosis, making use of the x-ray, chemical analysis and psychological investigation, show that one patient needs medicine, another needs a gastro-enterostomy, a third needs to have his wife taught cooking, and a fourth needs relief from worry, or at least comfort in grief. The clinic is a failure unless it supplies what is needed for cure in each case, whether it be medicine, operation, better cooked food, or spiritual comfort. Medical social service, Dr. Emerson said, is the highest form of therapy.

Miss Imogene Poole's paper on "Medical Social Diagnosis, the Keynote of Hospital Social Work," is published in full in the Out-Patient Department, page 362 of this issue.

Thursday, September 11, Afternoon

ROUND TABLE DISCUSSION

As last year, the round tables under the chairmanship of Mr. Asa Bacon, superintendent of Presbyterian Hospital, Chicago, proved most interesting and instructive. Among the questions and answers were the following:

PAYMENT OF ROENTGENOLOGISTS

"What is the most satisfactory arrangement for paying roentgenologists?" One speaker contended that the percentage basis was the best arrangement in small hospitals, because it made the roentgenologists equally interested with the hospital. The particular hospital represented by the speaker supplied the room while the roentgenologist supplied the apparatus. Another speaker stated that their arrangement was on a fifty-fifty basis, both as to expenses and profits. This particular hospital's net profits last year were $3,000. One speaker contended that the net rather than the gross profits should be shared, and the share of the net profits should be greater than 50 per cent. Results of this arrangement turned out to be better both for the hospital and the roentgenologist. In another hospital where the roentgenologist furnished his own apparatus and supplies he was paid a salary for taking pictures of ward patients. Another speaker contended that a "fifty-fifty" arrangement was unethical and commercial, and consequently should never be entered upon.

THE HELP PROBLEM AND ITS SOLUTION

"How can the present help problem best be solved?" One speaker contended that if the help were treated less like cattle they could be obtained more easily. Another speaker contended that it is not a question altogether of dollars and cents, but rather the simple one of general unrest among labor. He suggested that the question resolved itself into one of service to humanity, a contention which was stoutly contested by another speaker who contended that a laborer was entitled to a higher rating and it was all wrong to hold up the idea of service alone. One delegate thought that the cessation of immigration caused a large part of the trouble. He felt that we had educated our children to a point which made them unwilling to engage in menial labor. Another felt that we have been paying our help altogether too little in the past and that we must now pay adequate wages if we are to hold them.

When the employees of one hospital were about to strike the administration discussed the matter with them and found that they did not really know why they were about to go on a strike but simply wanted to be in line with other labor organizations which were striking. When they were made to realize that in its place their work was quite as important as the nurse's and doctor's they called the strike off. This speaker contended that there was often a tendency to isolate the workers and be too stern with them lest they over-ride the administration.

When Mr. Bacon, who led the discussion, called for answers to the question of what engineers were being paid in 75-bed hospitals the answers ranged from $85 per month to $150 and board. The questions as to what cooks were receiving in hospitals of 75 beds brought replies of from $50 to $85 per month.

CARE OF FLOORS

"How can hard-wood floors best be cared for?" One architect responded that the best way was not to put them in. Another suggested that they be made smooth and then covered with linoleum.

CONTROL OF WATER WASTAGE

"How best can the hospital control waste of water due

to leakage?" One superintendent stated that when he found his faucet leaking he went to a machine shop and had renewable seats inserted. This speaker made a plea for the standardization of hospital equipment along a line that would make it possible to repair individual parts, thereby obviating the necessity of discarding entire pieces of apparatus. One speaker who found that his water bills had risen from $25 to $95 a month got the city to look over his plumbing and finally found that the flushing supply of the toilets were leaking.

PAYMENT OF PATIENTS' FEES IN ADVANCE

"How shall the hospital collect from patients weekly in advance?" One superintendent said that he places announcements in the hands of relatives and friends at the admitting desk giving the specific rates, invites discussion, and makes it clear as to just what the care of the patient will cost. One speaker contended that it is not so much a question of the weekly payment as it is of the renumeration of the hospital for the entire service given the patient. He felt that laws similar to those safeguarding hotels should be passed in all the states. A layman said that in one of the hospitals with which he was acquainted the patients suffered from the constant nagging which they received from the administration regarding not paying, which was altogether inhuman and inexcusable. In one institution in which the administration had been hitherto lax in the collection of its bills, the whole question of payment of bills was taken directly to the public through a series of questions published in the daily newspapers. One of the questions asked was whether patients who were being treated in private rooms and who neglected to pay their bills should be removed to the ward. The answer to this and other questions enabled the administrator of this hospital to adopt a definite policy backed by public opinion. One speaker contended that unpaid bills were often the result of improper charges and stated that, if more care were used in admitting patients and classifying them financially, there would be less trouble regarding the payment of bills. One hospital has adopted the plan of placing bills on the superintendent's desk when they are two weeks overdue. The superintendent then turns them over to the social service department for investigation and if the social service department finds that the patient cannot afford to pay the bills he is put on the free list. One superintendent believed that the time to make all financial arrangements is when the patient comes into the hospital and felt that a frank business arrangement would not be resented. One hospital found it advantageous to make previous arrangements with the physicians who sent patients to the hospital by sending them schedules of rates and rules. Another hospital sought the assistance of the staff and those who sent in patients, asking them to use a card which ran as follows: "Please admit so and so to.....ward." This enabled the hospital to use the doctor's estimate as a source of information regarding the patient's financial ability.

THE DIETITIAN AS PURCHASER

"Should the dietitian buy the food for the hospital?" That depends on the dietitian, said one of the superintendents. Another, however, felt that the dietitian was not trained to buy food, but rather to work out the intricate problem in diets. This idea was strongly supported by several of the dietitians, who contended, however, that they should have something to say about the quality of the food that was purchased, particularly if they were to be held responsible for the food bills. One superintendent maintained that the purchasing agent should purchase the food as well as other supplies but in doing so should consult with the various heads of departments involved. An argument in favor of not having the dietitian do the purchasing was that the purchasing should not be in the hands of the one who consumes. An outburst of laughter followed the question whether anyone had the buying done by the board of women managers?

COMMUNITY AMBULANCE

"What has been the experience of the members present regarding a community ambulance service?" Mr. Olsen described the company which has been formed in Minneapolis called the Emergency Ambulance Association. All of the hospitals in town agreed to discontinue their ambulance services and turn the service over to a young man who bought four ambulances—Pierce-Arrow and White cars. The twelve hospitals now patronize this service, and each one is served by having three or four on call all of the time. They pay $4.50 a call for the free cases. Pay patients pay for the call themselves. The service is also open to the use of private families for transporting invalids from the home to the train or wherever the need may be. There is a 5 per cent cash discount to hospitals.

In regard to this service, Dr. Ancker said he did not believe an accident service was worth anything, unless an intern went with the ambulance, which, of course, is not the case in the service described by Mr. Olsen. Dr. Ancker presented the case of a woman giving birth to a child in an ambulance and one of the members said that he had never heard of an instance in which such procedure did the woman any harm. Dr. Ancker replied by asking if he would like his own wife to give birth to a child without skilled attendance. Upon a question from the chair, it was discovered that only about one-fourth of the members present operated an ambulance service of their own.

VOLUNTEER SOCIAL SERVICE WORKERS

"Are volunteer social service workers of any practical value?" Miss Poole, in charge of the social service department of the Cincinnati General Hospital, said that she had found them very helpful indeed. Another member volunteered the information that they had been extremely useful in assisting his social service department in non-technical work, such as writing records at the dictation of others, furnishing automobiles for the transportation of the social service workers, thus enabling them to make many more calls, and helping to bring the patients under the charge of the social service department to and from the hospital.

HOSPITAL FIRES

"Is it possible to obtain a fire-proof mattress for use in hospitals?" Mr. Sturm of Chicago said that such mattresses could be obtained and also suggested the use of fire-resisting paint in old buildings. Mr. Fowler of Poughkeepsie said that, in spite of the fact that he held frequent fire drills and instructed every nurse not to stamp out a fire, he had at times seen them trying to stamp out incipient blazes. In answer to a question as to whether awnings might not be fireproofed, Mr. Sturm explained that there were acetate of lead preparations that could be used in waterproofing cloth.

COMPENSATION CASES

"Should compensation cases be carried at less than cost?" Mr. Frank Chapman of Cleveland took the firm stand that actual cost should be charged for all compensation cases no matter in what part of the hospital they might be treated.

The afternoon session was adjourned to meet at 8:00 o'clock in the ballroom of the Hotel Gibson, since only a

portion of the questions asked had been answered and those present were eager that the list might be gone through.

SHORTAGE OF NURSES

"How can the question of the shortage of nurses be met?" Dr. Moss of Baltimore said that the Hebrew Hospital was employing nurses' maids to do the housekeeper's work which nurses had formerly done. Twelve maids had been employed by his institution. As a result nurses were less overworked, and were devoting more time to their studies and necessary work. Dr. Sexton, of Hartford, Conn., thought that the way to secure more nurses was to improve the conditions in the training schools. Mr. Test of Philadelphia asked the experience of those present regarding the continuance of training of college graduates who had been referred during the war to training schools. Dr. Sexton said that four out of eight college graduates referred to the Hartford Hospital had remained, and Mr. Test said that eight out of ten referred to the Pennsylvania Hospital had remained. Mr. Borden, Fall River, said he believed that the fundamental reason for women not entering training was that they now had opportunities for larger remuneration and work not comparable with nurses' work. There is a class of women, he said, who are now "floaters" upon the community and who ought to find opportunities which they had never recognized before. The nurse will play a very important part in the community life of the future. We ought not to talk about an eight-hour day for nurses. Of course, we ought to see to it that the nurses are not overworked and exhausted but there ought never to be any question about calling them on duty when they are needed. Nursing is a brain job and not a hand job, he said. Nurses are not clerks, bookkeepers, or saleswomen, but something of higher importance to the community. There are big openings for them as government and industrial officials, and there is a class of women unwilling to take up commercial professions who now ought to find a field for service in nursing more than ever before.

LABORATORY SERVICE

"How can the laboratory be made to pay?" Dr. Moss of the Hebrew Hospital stated that a flat rate was made for laboratory service, amounting to one day of hospital service for each patient. It the patient were a ward patient, he paid one day's ward rate, and if a private patient, he paid one day's room rate. The amount secured by this plan, Dr. Moss said, was sufficient to pay all laboratory costs and a balance in addition. No matter whether a person simply had a urinalysis done or four or five Wassermann's, the charge was the same. In answer to a query from Mr. Chapman, he said they had had no complaints from patients in regard to this system of charging.

FOOD FOR JEWISH PATIENTS

"Can a plan be adopted for serving kosher food to Jewish patients?" Mr. Frank Chapman said he believed that it should be not only the desire of the hospital but also the pleasure of the hospital to cater to the idiosyncrasies of its patients. He explained that they had once tried to run a kosher and the usual kitchen at the same time and that he believed it could not be well done. At the present time, he said, the hospital permits the patients to have brought in to them especially prepared dishes, but makes a special service charge for serving them.

Dr. Sexton then made the motion that a Round Table Discussion be held at the next convention of the American Hospital Association (with Dr. Bacon as chairman, added someone from the floor). The motion was greeted with much applause and unanimously carried. A suggestion was then made that, in order to educate their trustees to hospital problems in the way in which so many trustees had expressed themselves as having been educated during this session, each hospital superintendent agreed not to come back to the next convention without at least one trustee.

WATER TAX EXEMPTION

"What about water-tax exemption?" Upon the showing of hands it was found that a large majority of those present were not exempted from paying water taxes. Mr. Test suggested that it might be possible in some cases where a complete reduction could not be obtained to pay at least a percentage. In Philadelphia he said hospitals were charged 15 per cent of the normal tax. Mr. Olson said that the way to beat the water tax collector was to dig a well. His hospital had dug a well which cost $3,900 and the water is the best in the world. It costs them $15 a month to operate a pump and tank, although they buy about $30 of water from the city for use in their steam boiler. Formerly the water tax of the hospital had been about $150 a month.

TELEPHONE SERVICE

"How can the hospital beat the telephone company?" One member complained that since Uncle Sam had taken over the telephones in his state, not only had the half rate been restored to full rate but that that had been increased to 50 per cent again.

COMPENSATION INSURANCE

"How can the hospital beat the compensation insurance companies—at least for the cost of the hospital premiums?" One member said that every time the cook or an orderly or any other employee cut a finger, he or she was sent to the dispensary to have it dressed. The same rule applied to any other injury received in the course of duty by an employee. A charge of $1 a dressing was made against the insurance company carrying the hospital's workingmen's compensation insurance. At one time a dietitian was badly burned by an exploding gas oven. She was placed in a $6 a day room and the hospital collected full rate from the insurance company for the time she was a patient.

Friday, September 12, Afternoon

GENERAL SESSION

Dr. C. C. Pierce, Assistant Surgeon-General, United States Public Health Service, read a paper on the subject of "The Need for Hospital Facilities in the Venereal Disease Program," which was followed by the reports of various committees, and the election of officers. Dr. Pierce's paper, which in his absence was read by one of his assistants, will appear in THE MODERN HOSPITAL.

In the discussion of this paper, Dr. Robert Wilson endorsed the sentiment expressed in it that there should be more room in the general hospitals for so-called patients of venereal diseases, but condemned all sentimentality toward those suffering from these diseases. He felt that patients suffering from venereal disease should not be placed in the same class as those suffering from typhoid fever and pneumonia. Another speaker contended that there was a sympathetic side to these diseases and that those suffering from them should not be classed as criminals. One of the nurses testified that she and others who had entered upon the service of nursing venereal disease patients in the military hospitals with resentment and some feeling of horror soon changed their attitude to sympathy toward the patient. One speaker brought out the fact that the Pennsylvania Board of Life Insurance

will not approve hospitals that refuse to treat cases of venereal diseases.

The following officers were elected for next year: President, Dr. Joseph B. Howland, superintendent Peter Bent Brigham Hospital, Boston; president-elect, Dr. Louis R. Baldwin, superintendent University Hospital, Minneapolis, Minn.; first vice-president, Mr. H. E. Webster, superintendent Royal Victoria Hospital, Montreal, Canada; second vice-president, Dr. R. G. Brodrick, superintendent San Francisco Hospital, San Francisco, Cal.; third vice-president, Miss Margaret Rogers, superintendent Jewish Hospital, St. Louis; treasurer, Mr. Asa S. Bacon, superintendent Presbyterian Hospital, Chicago; trustee for one year, Dr. Louis H. Burlingham, Barnes Hospital, St. Louis; trustee for two years, Dr. Andrew R. Warner, superintendent Lakeside Hospital, Cleveland; trustee for three years, Rev. Maurice F. Griffin, St. Elizabeth Hospital, Youngstown, Ohio, and vice-president of the Catholic Hospital Association; trustee for three years, Mr. Richard P. Borden, Union Hospital, Fall River.

It was voted that the convention should meet next year in Montreal, Canada, the time to be either during the latter half of September or the first half of October.

The report of the treasurer and auditing committee showed the following:

Balance, as of Jan. 1, 1919	$ 2,586.09
Receipts	10,272.12
Total	$12,858.21
Disbursements	7,422.36
Balance on hand	$ 5,435.85

Following the brief report of the treasurer, the report of the Board of Trustees was read. The board reported having two meetings during the year, one in Cincinnati and the other in New York. At these meetings they approved the arrangement for the Cincinnati convention, approved the proposal that the Association cooperate with the Red Cross in the distribution of a surplus quantity of gauze, adopted the policy of establishing service bureaus, and approved the appointment of two delegates to represent the American Hospital Association at a meeting of the American Hospital Conference held in Chicago.

Following the report of the Board of Trustees, Dr. Goldwater outlined the policy and future program of the American Conference on Hospital Service (printed elsewhere in this issue). Reports were also submitted by the Association committee on Accounting and the following resolutions offered by the Committee on Resolutions were adopted:

WHEREAS, The American Hospital Association strongly protests against the attempt which is being made in Congress, under cover of the prohibition law, to protect patent medicine frauds and to promote the sale of vicious proprietary beverages which are nothing but alcoholic beverages possessing no medicinal value, therefore, be it

Resolved, that we ask that Congress consider most carefully the effects which would follow upon the enactment of any prohibition bill containing an unguarded exemption of so-called patent medicines.

WHEREAS, the American Red Cross has, through the medium of the American Hospital Association, given to the civilian hospitals of the country approximately forty-nine million yards of hospital gauze or the equivalent in made-up surgical dressings, about fifteen million yards of which have already been distributed; now therefore be it

Resolved, that this Association express its own great appreciation and the gratitude of the hospitals of the country for the magnificent and timely donation, especially at this crucial time when the hospitals are having such a desperate struggle for materials and money with which to continue their services to the sick.

WHEREAS, the world war has demonstrated more clearly than ever before the absolute importance of the skilled woman nurse in the successful conduct of battle by sea and by land, the preparation, therefore, and the efficient and humane care of the sick and wounded after the war is over;

WHEREAS, there should be recruited, trained and maintained for war as well as peace service, a corps of women of intelligence, education, character and ability, corresponding in every way with the type of men from which officers of the army and navy must be provided, and

WHEREAS, the duty of recruiting, training and educating a nurse for army and navy and civilian service devolves upon the hospitals of the country and cannot be successfully performed without assurance to prospective pupils that their professional standing will have due recognition and especially that, when called into the service of the army and navy, their position and authority shall be such as to enable them to properly enforce all orders necessary for the care and welfare of the patients; now, therefore, be it

Resolved, The Congress of the United States and all officers of its military and naval forces having interest or authority in the matter be respectfully requested and urged to take such steps as may be necessary to ensure that nurses now or hereafter engaged in the military and naval forces shall have proper military rank relative to officers of corresponding responsibility and authority in order that they may properly and efficiently discharge their duties and in order that hospitals may successfully induce women who are capable of satisfactorily performing the obligations of an army or navy nurse to undertake the necessary training with assurance that, if called into service, their character and ability will receive just recognition.

The meeting concluded with a few brief remarks by Mr. Test, superintendent of the Philadelphia Hospital, expressing the appreciation of the conference to the people of Cincinnati, the city, mayor, local committee, and public press, as well as the management of the Cincinnati Hospital and the officers of the Association, for the altogether pleasant and profitable convention about to close.

FORMATION OF AMERICAN PROTESTANT HOSPITAL ASSOCIATION

Survey to Be Made of Protestant Hospital Facilities in the United States and Possessions.

Over fifty representatives of Protestant hospitals, in attendance at the meeting of the American Hospital Association, on September 9, met and organized the American Protestant Hospital Association. Rev. Frank C. English, financial secretary of St. Luke's Hospital, Cleveland, was elected president, and Dr. John M. Cratty, superintendent of the Presbyterian Hospital, Philadelphia, secretary-treasurer. Headquarters of the association will be established in New York City, where Dr. English is director of the survey now being made, under the auspices of the Interchurch World Federation, of Protestant homes, hospitals, and institutions for children, the infirm and aged in the United States and possessions. The association voted to cooperate in the survey, which is to show and tabulate facilities and needs with a view to the development of future higher standards of service.

Dental Work a "Godsend"

Three hundred and twenty-six of Uncle Sam's fighters were treated in the Red Cross dental ambulance in France in a period of two months. This miniature dental office on wheels was in charge of the United States Army dentists, loaned to the Red Cross, who did everything from pulling teeth to performing the most delicate operations known to dental surgery. Before the army could provide proper facilities for dental work on troops in France, this ambulance was a veritable "godsend," as many commanding officers at the front expressed it. The men were treated at any camp where troops were billeted, and even up to the first-line trenches. Many men were treated under shell fire, and returned to their duties cured of that troublesome tooth. The dental ambulance consists of a regular dental chair with fixtures mounted on a closed automobile chassis. The equipment was supplemented by American instruments.

Covering a period of two months, this dental ambulance treated 326 soldiers at 471 sittings for 431 cases of dental caries, 72 dento-alveolar abscess, 21 gingivitis, 10 devitalized pulp, 4 impacted teeth, 3 pericementitis, 6 pulpites, 74 salivary deposits, 54 amalgam fillings, 2 amalgam and oxyphosphate, 253 oxyphosphate, 2 gutta percha, 27 root canal, 10 crowns reset, 5 bridges reset, 193 teeth extracted and 1 arsenical necrosis. In addition to the dental work done by this ambulance, the Red Cross had a free dental clinic at Red Cross Hospital No. 1 at Neuilly, formerly the American Ambulance Hospital, and afterwards operated by the Red Cross and the U. S. Army.

List of Personal Members, Institutional Delegates, State Delegates and Guests Registered at the American Hospital Association Meeting, Cincinnati

Personal Members

CALIFORNIA

Levy, Lewis Copper.....San Francisco, Supt., Mt. Zion Hospital

CANADA

Heard, T. H.....London, Supt., Victoria Hospital
Raymond, C. K.....Montreal, Supt., Montreal Hospital
Webster, H. C.....Montreal, Supt., Royal Victoria Hospital

COLORADO

Stoddard, T. A.....Pueblo, St. Mary's Hospital

CONNECTICUT

Sexton, Dr. L. A.....Hartford, Supt., Hartford Hospital
Geraghty, Miss E. M.....New Haven, New Haven Hospital
Hunter, J. A.....New Haven, Supt., Grace Hospital

DELAWARE

Lyons, Barrow B.....Wilmington, Supt., Delaware Hospital

FLORIDA

Harley, Lillah B.....Miami, Res. Supt., Miami City Hospital

GEORGIA

Brown, L. C.....Macon, Supt., Macon Hospital
Lond, J. M.....Atlanta, Georgia Baptist Hospital

ILLINOIS

Meyer, J. W.....Aurora, Mgr., Aurora Hospital
Bacon, Asa S.....Chicago, Supt., Presbyterian Hospital
Ball, Dr. O. F....Chicago, Pres., Modern Hospital Publishing Company
Bauernfeind, J. H.....Chicago, Supt., Evangelical Deaconess Hospital
Crain, Jr., G. D.....Chicago, Mgr. Editor, Hospital Management
Faroll, Sarah.....Chicago, Supt., Mt. Sinai Hospital
Olsen, E. T.....Chicago, Gen. Supt., Englewood Hospital
Perry, Maude A.....Chicago, 419 N. Central Park Boulevard
Young, Dr. C. O.....Chicago, Pres. Board of Directors, Washington Park Hospital
Weber, Jos. J.....Chicago, Mgr. Editor, Modern Hospital Magazine
Wilkins, Dr. C. D.....Chicago, Supt., Michael Reese Hospital
Purvis, Jos.....Danville, Supt., Lake View Hospital
Duncan, N. M.....De Kalb, Supt., De Kalb Public Hospital
Oberg, C. Irene.....Elgin, Supt., Sherman Hospital
Horn, Jessie A.....Ottawa, Supt., Ryburn Memorial Hospital

INDIANA

Lauman, Anna.....Ft. Wayne, Supt., Lutheran Hospital
Pound, Clara B.....Richmond, Supt., Reid Memorial Hospital
Combs, Chas. N.....Terre Haute, Supt., Union Hospital
Woods, C. S.....Indianapolis, Supt., Methodist Hospital

IOWA

Collins, Herbert O.....Iowa City, Supt., University of Iowa
Graham, W. T.....Iowa City, Supt., University Hospital
Ludy, Mary B...Des Moines, Supt. of Nurses, Iowa Lutheran Hospital
Matthews, T. C.....Sioux City, Supt., New Samaritan Hospital

KANSAS

Moulder, J. McLean.....Kansas City, Supt., Bethany Hospital

KENTUCKY

Royan, Josephine.....Lexington, Supt., Good Samaritan Hospital
Gaggs, A. M.....Louisville, Supt., Norton Memorial Sanitarium
Foremans, Mary E.....Louisville, Supt., City Hospital
Fowler, Dr. J. W.....Louisville, Hospital Consultant

LOUISIANA

Abramson, Louis.....Shreveport, Supt., North Louisiana Sanatorium

MARYLAND

Moss, Dr. Harry J.....Baltimore, Supt., Hebrew Hospital
Seem, B. B.....Baltimore, Asst. Supt., Johns Hopkins Hospital

MASSACHUSETTS

Coleman, Louise M.....Boston, Supt., House of Good Samaritan
Faxon, Dr. N. W.....Boston, Asst. Resident Physician, Massachusetts General Hospital
Frost, Harold M.....Boston, Asst. Supt., Massachusetts Eye and Ear Infirmary
Loveland, F. A.....Corry, Pres. Corry Hospital Association
Stevens, E. F.....Boston, Architect, 9 Park Street
Whing, D. V.....Boston, Supt, Boston City Hospital
Borden, Richard P.....Fall River, Trustee, Union Hospital
Fuller, David H.....Fall River, Supt., Municipal Hospitals
Smith, A. W.....Fall River, Supt., Union Hospital
Barualy, M. D.....Gardiner, Heywood Hospital
Price, Emily.....Chelsea, Supt., R. S. Frost General Hospital
Pratt, Dr. Mason R.....Chatham
Cleland, Alice C.....Northampton, Supt., Cooley-Dickinson Hospital
Coleman, Laura E.....Plymouth, Supt., Jordan Hospital

MICHIGAN

Parnall, C. G.....Ann Arbor, Dir., University Hospital
Cooner, Lewis F.....Battle Creek, Dean, Battle Creek Sanitarium
Gailey, I. M.....Detroit, Supt, Samaritan Hospital
Schill, Anna M.....Flint, Supt., Hurley Hospital
Parker, Geo. A.....Grand Rapids, Supt., Butterworth Hospital
Eckman, Rena S.....Jackson, Jackson City Hospital
Scott, Katherine.....Lansing, Supt., Snarrow Hospital
McElderry, Grace.....Muskegon, Supt., Hackley Hospital
Morrill, W. P.....Benton Harbor, Lieut.-Col. Medical Corps
Aikens, Charlotte A.....Detroit, Editor, Trained Nurse and Hospital Review

MINNESOTA

Christian, A. J.....Minneapolis, Supt., Northwestern Hospital
Holmes, Susan.....Minneapolis, Supt., Abbott Hospital
Knight, Mrs. Sarah H.....Minneapolis, Asbury Hospital
Matlick, Bertha.....Minneapolis, Supt., Hill Crest Hospital
Neslon, Sister L.....Minneapolis, Supt., Northwestern Lutheran Deaconess Hospital
Garrison, C. J.....Wabasha, Supt., Buena Vista Sanatorium

MISSOURI

Castelaw, Rush E.....Kansas City, Supt., Wesley Hospital
Haworth, E. P.....Kansas City, Supt., Wilcrest Hospital
Wooddell, F. L.....Kansas City, Bus. Mgr., Research Hospital
Chappell, F.....St. Louis, Supt., St. Luke's Hospital
Cowles, A. B.....St. Louis, Supt., St. Louis Maternity Hospital
Henry, Dr. Rolla.....St. Louis, Supt., City Hospital
Schoenherr, Marie M.....St. Louis, Supt., Bethesda Hospital
Nevison, V. R.....Springfield, Supt., Springfield Hospital

NEBRASKA

Fuller, Blanche M.....Omaha, Supt., Nebraska Methodist Hospital

NEW JERSEY

Miller, Elizabeth.....Dover, Supt., Dover General Hospital
Ricketts, Henry E.....Belleville, Supt., Essex County Hospital
Talbot, Chas. E.....Newark, Supt., City Hospital
Miliman, Miss B. M.....Orange, Supt., Memorial Hospital
Wallace, Margaret A.....Passaic, Supt., Passaic General Hospital
Smith, J. M.....Plainfield, Supt., Muhlenberg Hospital
Kavanaugh, E. A.Secaucus, Hudson County Contagious Disease Hospital

NEW YORK

Ford, Clarence E....Albany, Supt., New York State Board of Charities
Littlefield, J. A.....Albany, Supt., Homeopathic Hospital
Ross, Renwick.....Buffalo, Supt., Buffalo General Hospital
Fall, Anthony.....Buffalo, Supt., Homeopathic Hospital
Yager, Mary E.....Buffalo
Gibson, Mrs. G. M.....Brooklyn, Supt., Prospect Heights Hospital
Jacobs, Dr. Wm. F.....Brooklyn, Supt., Cumberland Street Hospital
Nealley, Dr. W. G.....Brooklyn, Supt., Brooklyn Hospital
McCreight, M. E.....Elmira, Supt., Arnot Ogden Memorial Hospital
Beattie, G. B.....Ithaca, Supt., Ithaca City Hospital
Graves, Lulu.....Ithaca, Cornell University
Saffeir, R. A.....Jamaica, Supt., Jamaica Hospital
Goldsmith, Jean S.....LeRoy, Dietitian, Genesee Pure Food Company
Vander Water, C. P.....Mt. Vernon, Supt., Mt. Vernon Hospital
Altschul.....New York
Bartine, Oliver H...New York, N. Y. State Charities Aid Association
Black, Mrs. F. E.....450 West One Hundred and Forty-ninth Street
Buck, Wm B.....New York, Deputy Convr. for Serbian Relief
Crandall, E. P.....New York, Secy., National Organization for Public Health Nursing
Diehl, Chas. F.....New York, Supt., Hospital for Infirmities
Greene, E. C.....New York, Supt. of Nurses, Mount Sinai Hospital
Greene, F. D.....New York, Gen. Secy., United Hospital Fund
Holmes, Geo. F.....New York, Supt., Memorial Hospital
Laub, Raymond G.....New York, Med. Supt., Greenpoint Hospital
Loder, C. S.....New York, Hospital Consultant, 30 Church Street
Surkivis, F. L.....New York, Supt, Laura Franklin Hospital
Van Slyke, E. J.....New York, Supt., Woman's Hospital
Wilson, R. J.....New York, Trustee, Department of Health, Willard Parker Hospital
Fowler, B. M.....Poughkeepsie, Supt., Vassar Brothers Hospital
Johnston, M. L.....Rochester, Supt., Rochester Homeopathic Hospital
Keith, M. L.....Rochester, Sunt., Rochester General Hospital
Stiler, W.....Rochester, Asst. Supt., Rochester Homeopathic Hospital
Denton, Emily.....Saranac, Sunt., General Hospital of Saranac
McCalmont, M. E.....Troy, Supt., Samaritan Hospital

NORTH CAROLINA

Kelley, E. A.....Fayetteville, Asst. Supt., Highsmith Hospital
Munroe, John P.....Charlotte, Chief Executive, Charlotte Sanatorium
Myers, Dr. J. Q.....Charlotte, Sunt., Tranquil Sanatorium
Locke, D. E.....Roanoke Rapids, Supt., Roanoke Rapids Hospital

OHIO

Yearick, H. G.....Akron, Gen. Supt., City Hospital
Earling, H. A.....Ashtabula, Supt. of Nurses, General Hospital
Quimby, J. C.....Bellaire, Supt., City Hospital
Bachmeyer, Dr. A. C.....Cincinnati, Sunt. and Medical Director, Cincinnati General Hospital
Butler, Alice.....Cincinnati, Pres. Board of Trustees, Christ Hospital
Deaver, Mary F.....Cincinnati, Sunt. of Nurses, Christ Hospital
Detmer, Sister Emma.....Cincinnati, Deaconess Hospital
Gary, Dr. I. C.....Cincinnati. Pres., People's Hospital
Lohmann, H. G.....Cincinnati, Sunt, Deaconess Hospital
Peters, Wm. H.....Cincinnati, Health Officer
Roberts, M. M.....Cincinnati, Supt., C. R. Holmes Private Hospital
Russell, M. M.....Cincinnati, Sunt., Jewish Hospital
Thatcher, Alice.....Cincinnati, Supt., Christ Hospital
Rescherer, F. H.....Cincinnati, Sunt., Woman's Hospital
Burton, B. C.....Cleveland, Dietitian, Lakeside Hospital
Hildreth, C. B.....Cleveland, St. Luke's Hospital
Hogle, A. C.....Cleveland, Sunt., Huron Road Hospital
Truesdell, B. M.....Cleveland, Y W C A., Cleveland
Gutwald, K. R.....Columbus, Sunt., Mercy Hospital
Moore, G. W.....Columbus, Sunt. of Nurses, Protestant Hospital
Crew, E. R.....Dayton, Supt., Miami Valley Hospital
Kingston, D. C.....Fremont, Supt., Memorial Hospital
Landh, S.....Sandusky, Sunt., Good Samaritan Hospital
Behrens, P. W.....Toledo, Sunt., Toledo Hospital
Sands, M. E.....Toledo, Sunt. of Nurses, Toledo Hospital
Surbray, M. E.....Warren, Sunt., Warren Hospital
Genevieve, Sister M.....Youngstown, Supt., St. Elizabeth Hospital

PENNSYLVANIA

Viehdorfer, Alma M.....Allentown, Supt., Allentown Hospital
Frick, O. M.....Abington, Supt., Abington Memorial Hospital
Hamer, L. M.....Altoona, Supt., Mercy Hospital
Morgart, Sara M.....Bellefonte, Sunt., Bellefonte Hospital
Essig, Anna.....Coatesville, Supt., Coatesville Hospital
Beers, Mollie.....Johnstown, Sunt., Cambria Steel Hospital
Moyer, K. A..Johnstown, Sunt., Conemaugh Valley Memorial Hospital
Rodkey, E. L....New Brighton, Sunt., Beaver Valley General Hospital
Parrish, N. F.....New Kensington, Supt., Citizens General Hospital
Appel, Katherine.....Philadelphia, Supt., Howard Hospital

Cannon, M. A.....Philadelphia, Dir Social Service Department, University of Pennsylvania
Cratty, J. M.....Philadelphia, Supt., Presbyterian Hospital
Eager, M. L.....Philadelphia, Supt., Rush Hospital
Geffen, Jos.....Philadelphia, Supt., Mt. Sinai Hospital
Jeffrey, A. T.....Philadelphia, Supt., St. Christopher's Hospital
Lindblad, C. A.....Philadelphia, Supt., Hahnemann Hospital
Page, Henry E.....Philadelphia, Med. Supt., Lankenau Hospital
Tannenbaum, Simon.....Philadelphia, Supt., Jewish Hospital
Test, Sam'l D.....Philadelphia, Supt., Pennsylvania Hospital
Wayson, G. W.....Philadelphia, Supt., Samaritan Hospital
Anselman, Sister M.....Pittsburgh, St. Joseph's Hospital
Etheldreda, Sister M.....Pittsburgh, Supt. of Nurses, Mercy Hospital
Ford, Mrs A. Louise.....Pittsburgh, Supt., Children's Hospital
Innocent, Sister M.....Pittsburgh, Supt., Mercy Hospital
Alacoque, Sister M.....Pittsburgh, St. Joseph's Hospital
Weiss, Edw. A.....Pittsburgh, Mercy Hospital
Gallery, E. A.....Reading, Supt., Reading Hospital
Wright, Mrs. L.....Reading, Supt., Homeopathic Hospital
Dundas, E. B...Rochester, Supt. of Nurses, Rochester General Hospital
Bishop, Howard E.....Sayre, Supt., Robt. Packer Hospital
Burgan, J. E.....Scranton, Supt., State Hospital
McCalpin, Luella.
Cumming, Margaret M.....Sharon, Supt., C. H. Buhl Hospital
Armstrong, Victoria.....Washington, Supt., City Hospital
Gainor, E. M.....Washington, Supt., Washington Hospital
Herman, K. B.....Wilkinsburg, Supt., Columbia Hospital
Matthews, E. E.....Wilkes-Barre, Supt., Wilkes-Barre City Hospital
Smith, Mary A.....York, Supt., York Hospital

RHODE ISLAND

Richardson, Dr. D. L.....Providence, Supt. and Pres., City Hospital

SOUTH CAROLINA

Clark, W. J.....Columbia, Supt., Columbia Hospital
Montgomery, Mrs. F. M.....Taylors, Supt., Steedley Clinic

TENNESSEE

Archer, M. M.....Memphis, Supt., Baptist Memorial Hospital
Davidson, S. G.....Memphis, Supt., Baptist Memorial Hospital

TEXAS

Hornbeck, S. H.....Corsicana, Physicians' and Surgeons' Hospital
Franklin, J. B.....Dallas, Supt., Baptist Memorial Hospital
Cornish, Miss L. E.....Port Arthur, Supt., Mary Gates Hospital
Hill, Dr. H. Philip.....San Antonio, R. B. Green Memorial Hospital
Walthall, Mrs. T. J.....San Antonio, Supt., Physicians' and Surgeons' Hospital
Putts, M. J.....Temple, Supt., King's Daughters Hospital

UTAH

Crossland, Mrs. F. W.....Salt Lake City, Supt., St. Mark's Hospital

VIRGINIA

Van Vort, Rose Z.....Richmond, Supt., Stuart Circle Hospital
Thacker, Miss S. V.....Roanoke, Supt., Lewis Gale Hospital
Davison, N. P.....Staunton, Supt., King's Daughters Hospital

DISTRICT OF COLUMBIA

Walsh, Dr. Wm. H.....Washington

WEST VIRGINIA

McIntosh, Mrs. N.....Princeton, Supt., Princeton Hospital
French, N. S.....Welch, Supt. of Nurses, Welch Hospital
Clark, Pliny O.....Wheeling, Supt., Ohio Valley Hospital
Goodnow, Minnie...Wheeling, Dir. of Occupation, Ohio Valley Hospital

WISCONSIN

Fritschel, H. L.....Milwaukee, Supt., Milwaukee Hospital
Munger, Dr. C. W.....Milwaukee, Supt., Columbia Hospital
Davies, D. H.....Wauwatosa, Pres. Board of Administrators

WYOMING

Phifer, Margaret.....Wheatland, Supt., Wheatland Hospital

Institutional Delegates

ALABAMA

Davis, Miss Ruth.....Selma

CALIFORNIA

Morrow, Louise.....San Francisco

CANADA

Fisher, Dr. Alexander.....Calgary, Alberta
Decker, C. J.....Toronto

CONNECTICUT

Partland, Dr. R. M.....Hartford
Prindiville, K. M.....New London

DELAWARE

Turner, A. H.....Wilmington

GEORGIA

Clare, Mother M.....Atlanta, Supt., St. Joseph's Infirmary
Elkin, Dr. W. S.....Atlanta, Dean, Atlanta Medical College
Shivers, A. M.....Augusta, Supt., Margaret Wright Hospital
Wright, Thos. R.....Milledgeville, Trustee, Georgia State Sanitarium
Jones, Louise.....Rome, Supt. of Nurses, Harbin Hospital
Rakestraw, Miss Blanche.....Rome, Supt., Harbin Hospital
Evangeline, Sister M..Savannah, Sister Superior, St. Joseph's Hospital

ILLINOIS

Ahern, D. C.....Chicago, Supt., Hahnemann Hospital
Ackerman, Esther M..Chicago, Head Dietitian, Michael Reese Hospital
Christian, Miss Charlotte..Chicago, Supt., Passavant Memorial Hospital
Colwell, N. P.....Chicago, Secy., American Medical Association
Hockaday, E. J.....Chicago, Supt., West Suburban Hospital
Hoener, Valentine R.....Chicago, Asst. Supt., Hahnemann Hospital
Joseph, Blanche M....Chicago, Field Dietitian, Michael Reese Hospital
Meyer, J. Shelly.....Chicago, Vice-Pres., Wesley Memorial Hospital
Ragna Nord, Sister.....Chicago, Supt. of Nurses, Lutheran Deaconess Hospital
Olsen, Dr. E. T.....Chicago, Gen. Supt., Englewood Hospital
Young, Dr. C. O.....Chicago, Pres. and Director, Washington Park Hospital
Sheehan, Helen M.....Rockford, Asst. Supt., Rockford Hospital
Foley, John C.....Waukegan, Surgeon, Jane McAllister Hospital

INDIANA

Braun, Sister Caroline.....Evansville, Supt., Prot., Deaconess Hospital
Wellborn, Jas. Y.....Evansville, Prop., The Walker Hospital
Neff, Robt. E.....Indianapolis, Auditor, Robt. W. Long Hospital
Duckworth, Edith L.....Indianapolis, Industrial Nurse

IOWA

Northrop, N. Adela.....Dubuque, Supt., Finley Hospital

KANSAS

Steiner, Dillia.....Kansas City, Dietitian, Bethany Hospital
Bowen, Dr. W. F.....Topeka, Supt., Christ's Hospital
Langley, Belle E.....Wichita, Supt., Wichita Hospital

KENTUCKY

Steinhauer, Sophia F.....Dayton, Supt., Speer Memorial Hospital
Beck, Eva.....Harlan, Supt., Harlan Hospital Association
Benigna, Sister Mary.....Lexington, Supt., St. Joseph's Hospital
Josella, Sister.....Lexington, St. Joseph's Hospital
Tuley, Henry E.....Louisville, Supt., Louisville City Hospital
Simons, W. E.....Dayton, Trustee, Spurs Memorial Hospital

LOUISIANA

Murphy, Sara C.....Monroe, Supt. of Nurses, St. Francis Sanitarium
Jordan, Miss Julia.....New Orleans, Supt., Presbyterian Hospital
Stafford, Dr. S. W.....New Orleans, Supt., Charity Hospital

MARYLAND

Fisher, Dr. Chas. T.....Baltimore, Supt., Maryland General Hospital
Moss, Dr. H. J.....Baltimore, Supt., Hebrew Hospital
Sampson, Stella W..Baltimore, Supt., Hospital for Women of Maryland

MASSACHUSETTS

Jones, Miss Marion R.....Athol, Head Nurse, Athol Memorial Hospital
Kendall, Miss Sarah D.....Athol, Supt., Athol Memorial Hospital
Davis, Michael W., Jr.....Boston, Director of Boston Dispensary
Gibson, Anna L.....Boston, Supt., C. P. Huntington Hospital
Wilks, Miss Caroline B.....Boston, Supt., Boston Dispensary
Wood, B. M.....Boston, Dietitian, Boston Dispensary
Tripp, Geo. H.....New Bedford, Trustee, St. Luke's Hospital

MICHIGAN

Springer, D. W....Ann Arbor, Supt., University of Michigan Hospital
Bloomfield, Helen M....Battle Creek, Supt., Nichols Memorial Hospital
Van Dorn, Miss L.....Battle Creek, Head Dietitian, Battle Creek Sanitarium
Troy, Mrs. M. S.....Battle Creek, Supt. of National Training School, Battle Creek Sanitarium
Stewart, Chas.....Battle Creek, Asst. Supt., Battle Creek Sanitarium
Gruber, T. K.....Detroit, Supt., Michigan Mutual Hospital
Holt, Mrs. Fred....Detroit, Pres. Board of Trustees, Woman's Hospital
Schill, Anna M.....Flint, Supt., Hurley Hospital
Daverman, Geo. J.....Grand Rapids, Architect, Christian Psychopathic Hospital
Stuart, G. J.....Grand Rapids, Supt., Christian Psychopathic Hospital
Wells, Dr. Merrill....Grand Rapids, Supt., Blodgett Memorial Hospital
McElderry, Grace.....Muskegon, Supt., Hackley Hospital
Matthews, L.....Saginaw, Supt., Saginaw General Hospital
Thompson, L.....Saginaw, Supt., Woman's Hospital
Hewson, Mrs. F. W.....Traverse City, Supt., General Hospital
Hacken, Dr. R. R.....Detroit, Supt., Delray Industrial Hospital

MINNESOTA

McRae, Dr. Alexander J.....Duluth, Supt., St. Luke's Hospital
Jordan, W. H.....Minneapolis, Dir., Asbury Hospital
Olson, G. W.....Minneapolis, Supt., Swedish Hospital
Ancker, Dr. Arthur B.....St. Paul, Supt., City and County Hospital

MISSISSIPPI

Hopper, F. C.....Meridian, Mgr., Matty Hersee Hospital
Hopper, Mrs. B. M..Meridian, Supt. of Nurses, Matty Hersee Hospital

MISSOURI

Wagner, J. W.....Kansas City, Pres., Research Hospital
Rosalia, Sister M.....Kansas City, Diet., St. Mary's Hospital
Burlingham, Dr. L. H.....St. Louis, Supt., Barnes Hospital
Cowles, Annette B.....St. Louis, Supt., St. Louis Maternity Hospital
DeChautal, Sister M.....St. Louis, Asst. Supt., St. Mary's Infirmary
Gulalia, Sister M.....St. Louis, Superior, St. Mary's Infirmary
Rogers, Margaret.....St. Louis, Supt., Jewish Hospital

NEBRASKA

Osterholm, Alvin N.....Omaha, Supt., Swedish Mission Hospital

NEW HAMPSHIRE

Smith, L. R.....Manchester, Supt., Manchester City Hospital
Wallace, Martha.....Nashua, Nashua Memorial Hospital

NEW JERSEY

Kavanaugh, Miss E. A.....Jersey City, Supt., Hudson County Contagious Hospital
Harper, Mrs. Wm. D.....Long Branch, Pres, Monmouth Memorial Hospital
Smith, J. M.....Plainfield, Supt., Muhlenburg Hospital
Shute, Ida M.....Secaucus, Supt. of Nurses, Tuberculosis Hospital

NEW YORK

Atkin, Edith..Binghampton, Supt. of Nurses, Binghampton City Hospital
Jacobs, Wm. Frank.....Brooklyn, Supt., Cumberland Street Hospital
Combs, Josephine H.....Gloversville, Supt., Nathan Littauer Hospital
Keeler, Sara..Gloversville, Supvr. Operation, Nathan Littauer Hospital
Beattie, G. B.....Ithaca, Supt., Ithaca City Hospital
Robertson, Marie.....Jamestown, Supt., Jones General Hospital
Shear, Fanchon C.....Jamestown, Supt., W. C. A. Hospital
Diehl, Chas. F.....New York, Supt., Hospital for Deformities
Gwyer, Dr. Fred'k.....New York, Supt., Lincoln Hospital and Home
Holmes, Geo. F.....New York, Supt., Memorial Hospital

Kremer, Dr. G. .....Staten Island, N. Y., Supt., Sea View Hospital
Laub, Dr. R. G. .....New York, Med. Supt., Greenpoint Hospital
Van Slyke, Dr. E. J. .....New York, Supt., Woman's Hospital
Ward, Agnes A. .....New York, Gen. Supt. of Nurses, Public Charities
Young, Chas. H. .....New York, Supt., Presbyterian Hospital
Bates, Ethel H. .....Olean, Supt., Olean General Hospital
Jackson, Rowena .....Rochester, Dietitian, Hahnemann Hospital

OHIO

Donnally, Dorothy .....Akron, Asst. Supt., Children's Hospital
Frye, Mrs. E. A. .....Alliance, Supt., Alliance City Hospital
Quimby, Miss J. C. .....Bellaire, Supt., City Hospital
Alexius, Sister Rose .....Cincinnati, Supt., Good Samaritan Hospital
Cyril, Sister Mary .....Cincinnati, Supt. of Nurses, Good Samaritan
Felicitas, Sister M. Cincinnati, Operating Room Nurse, Sisters of Mercy
Gamble, Jas. N. .....Cincinnati, Trustee, Christ Hospital
Gath, Dr. Philip .....Cincinnati, Asst. Supt., Cincinnati Tuberculosis Sanatorium
Jones, Mary M. .....Cincinnati, Supt., Children's Hospital
Ahern, Rev. .....Cleveland, Chaplain, St. John's Hospital
Baines, G. L. .....Cleveland, Social Service Worker, Lakeside Hospital
Chapman, F. E. .....Cleveland, Administrator, Mount Sinai Hospital
Delphine, Sister M. .....Cleveland, Nurse, St. John's Hospital
Duffy, E. R. .....Cleveland, Chaplain, St. Vincent's Charity Hospital
English, Dr. F. C. .....Cleveland, Secy., St. Luke's Hospital
Fedelmia, Sister M. .....Cleveland, Charity Hospital
Hoffman .....Cleveland, Secy., Fairview Park Hospital
Mary, Sister .....Cleveland, Secy.-Treas., St. John's Hospital
Teachout, Mrs. A. R. .....Cleveland, Social Service Worker, Woman's Hospital
Trea, Sister M. .....Cleveland, Charity Hospital
Warner, Dr. A. R. .....Cleveland, Supt., Lakeside Hospital
Maurer, M. L. .....East Akron, Supvr., Springfield Lake Sanatorium
Pattison, L. E. .....East Liverpool, Supt., East Liverpool City Hospital
Gervase, Sister M. .....Hamilton, Supt., Mercy Hospital
Obrist, A. F. .....Martins Ferry, Supt., Martins Ferry Hospital
Hathaway, D. I. .....Massillon, Supt., Massillon City Hospital
Neer, Dorothy .....Springfield, Supt., City Hospital
Eversman, Mrs. T. E. .....Toledo, Chairman House Committee, Maternity and Children's Hospital
Law, Mrs. Robt. .....Toledo, Pres., Maternity and Children's Hospital
Pew, Mrs. Robt. C. .....Toledo, Secy.-Chair., Maternity and Children's Hospital
Genevieve, Sister M. .....Youngstown, Supt., St. Elizabeth's Hospital
Geraldine, Sister M. Youngstown, Anesthetist, St. Elizabeth's Hospital
Griffin, Rev. Maurice. ...Youngstown, Trustee, St. Elizabeth's Hospital
Yengling, R. W. Youngstown, Supt., Youngstown Hospital Association
Joseph, Sister M. Zanesville, Supt. of Nurses, Good Samaritan Hospital
Laurine, Sister M. ...Zanesville, Head Nurse, Good Samaritan Hospital
Alexandria, Sister .....Cincinnati, Supt., Seton Hospital
Elicta, Sister .....Cincinnati, Supt. of Nurses, Seton Hospital

PENNSYLVANIA

Hamer, L. M. .....Altoona, Supt., Mercy Hospital
Oler, Josephine O. .....Clearfield, Supt., Clearfield Hospital
Shaffer, Susan V. .....Easton, Supt., Easton Hospital
Gill, Chas. A. .....Germantown, Supt., Germantown Hospital
Owen, David F. .....McKeesport, Supt., McKeesport Hospital
Rodkey, Elizabeth. New Brighton, Supt., Beaver Valley General Hospital
Appel, Katherine .....Philadelphia, Supt., Howard Hospital
Boteler, Mary E. .....Philadelphia, Supt., Children's Hospital
Jeffrey, Annie T. .....Philadelphia, Supt., St. Christopher's Hospital for Children
Whiting, Dr. A. D. .....Philadelphia, Med. Dir., Germantown Hospital
Francis, Sister Mary .....Pittsburgh, Supt., Pittsburgh Sisters of Charity
Laurentine, Sister M. .....Pittsburgh, Nurse, St. Francis Hospital
Marcella, Sister M. .....Pittsburgh, Directress of Nurses, Pittsburgh Sisters of Charity
Norberta, Sister M. .....Pittsburgh, Head Nurse, St. Francis Hospital
Tinsley, Esther J. .....Pittston, Sunt., Pittston Hospital
Dunham, F. M. .....Sayre, Trustee, Robt. Packer Hospital
McLaren, Margaret .....Warren, Supt., Warren General Hospital
Collins, Faith A. .....Corry, Corry Hospital
Huggins, R. R. .....Pittsburgh, Pres. of Staff, St. Francis Hospital

SOUTH CAROLINA

Wilkinson, Albert H. .....Charleston, Supt., Roper Hospital
Bushbee, Miss Olivia. Columbia, Directress of Nurses, Columbia Hospital
Clark, W. J. .....Columbia, Supt., Columbia Hospital

TEXAS

Hornbeak, S. H. .Corsicana, Supt., Physicians' and Surgeons' Hospital
Franklin, J. B. .....Dallas, Supt., Texas Baptist Memorial Sanitarium
Holliday, Miss Helen T. .....Dallas, Supt., Training School, Texas Baptist Memorial Sanitarium
Adams, Neil .....Ft. Worth, Asst. Supt., All Saints Hospital
House, Margery .....Ft. Worth, Supt., All Saints Hospital
Burnett, Mrs. J. B. .....Houston, Supt., Baptist Sanitarium
Jolly, Robt. .....Houston, Bus. Mgr., Baptist Sanitarium
Hill, Dr. H Philip .....San Antonio, Supt. and Mgr., Robt. B. Green Memorial Hospital
Childress, W. A. .....Houston, Trustee and Treas, Hermann Hospital

UTAH

Crossland, Mrs. F. H. .....Salt Lake, Supt., St. Mark's Hospital
Wyvill, R. R. .....Salt Lake, Supvr., Holy Cross Hospital

WEST VIRGINIA

Griffin, Miss A. M. .....Keyser, Supt. of Nurses, Hoffman Hospital
Oates, T. K. .....Martinsburg, Supt., City Hospital
Vernon, Emma .....Parkersburg, Supt., City Hospital
Clark, Pliny O. .....Wheeling, Supt., Ohio Valley General Hospital

WISCONSIN

Agnes, Sister Mary .....Fond du Lac, Dietitian, St. Agnes Hospital
Natalia, Sister M. .Fond du Lac, Supt. of Nurses, St. Agnes Hospital
Seraphia, Sister M. .Fond du Lac, Asst. Supt.-Secy., St. Agnes Hospital
Wiley, F. S. .....Fond du Lac, Chief of Staff, St. Agnes Hospital
Hipke, Mrs. G. A. ....Milwaukee, Supt., Milwaukee Maternity Hospital
McKee, G. I. .....Milwaukee, Supt., Milwaukee Children's Hospital
Munger, Dr. C. W. .....Milwaukee, Supt., Columbia Hospital
Wifferman, Helen L. .....Milwaukee, Supt., Mount Sinai Hospital

State Delegates

CONNECTICUT

Godfrey, Chas. C. .....Bridgeport, Pres., Bridgeport Hospital
Lyons, Barrow B. .....Wilmington, Supt., Delaware Hospital

GEORGIA

Bradfield, Dr. J. H. .....Atlanta, Supt., Battle Hill Sanatorium
David, E. C. .....Atlanta, Prop., Davis-Fischer Sanatorium
Johnston, Steve R. .....Atlanta, Supt., Grady Hospital
White, Geo. R. .....Savannah, Pres., Park View Sanitarium

IDAHO

Bennett, Mrs. E. R. .....Boise, Public Health Work

ILLINOIS

Myers, Dr. Karl A. .....Chicago, Medical Work, Cook County Hospital
Hall, Fred G. .....Galesburg, H. C. Galesburg Hospital
Ransom, John E. .....Chicago, Supt., Central Free Dispensary
Ringland, Mrs. M. P. .....Quincy, Supt., Blessing Hospital
Straub, Dr. Jos. C. .....Springfield, Supt., St. John's Hospital

INDIANA

Wilson, Mrs. J. B. .....Bloomington, Chairman of Directors, Bloomington Hospital
Humphrey, Edna. ....Crawfordsville, Secy., Inspector Training Schools
Springer, Elizabeth E. Huntington, Supt., Huntington County Hospital
Medendorp, Anna. .....LaFayette, Supt., LaFayette Home Hospital
Pound, C. B. .....Richmond, Supt., Reid Memorial Hospital
Emerson, Charles P. .....Indianapolis, Dean, Indiana University School of Medicine
Cowing, H. A. .....Muncie, Pres., Indiana State Board of Health
Foreman, Dr. H. L. ....Indianapolis, Supt., Indianapolis City Hospital
Willis, E. G. .....Vincennes, Supt., Good Samaritan Hospital

IOWA

Haarer, Mary C. .Iowa City, Supt. of Nurses, State University of Iowa

MARYLAND

Sampson, Stella W. .....Baltimore, Supt., Hospital for Women
Rowland, J. M. H. .....Baltimore, Dean, University of Maryland

MASSACHUSETTS

Alley, Leon A. .....Rutland, Supt., Rutland State Sanatorium
Way, Dr. N. T. .....Attleboro
Solomon, Dr. Augusta. .....Attleboro

MICHIGAN

Babcock, Warren L. .....Detroit, Supt., Grace Hospital
Bowers, Irene. .....Jackson, Supt., Jackson City Hospital
Schill, Anna M. .....Flint, Supt., Hurley Hospital
Scott, Katherine. .....Lansing, Supt., Sparrow Hospital

MISSISSIPPI

Crawford, Roland H. .....Laurel, Supt., Southern Mississippi Hospital
Philpot, V. B. .....Houston, Supt., Houston Hospital

MISSOURI

Craig, Dr. T. B. M. .....Nevada, State Hospital No. 3

NORTH CAROLINA

Myers, Dr. John Q. .....Charlotte, Secy., Tranquil Park Sanatorium
Highsmith, J. F. .....Fayetteville, Pres., Highsmith Hospital

NEW JERSEY

Spencer, Dr. Henry. Jersey City, New Jersey State Department of Health

OHIO

Miles, R. E. .....Columbus, Dir., Ohio Institute for Public Health
Jameson, Mary A. .....Columbus, Supt., Grand Hospital
Sawyer, W. E. .....Marion, Sawyer Sanatorium

OKLAHOMA

Hardy, Walter. .....Ardmore, Prop., Hardy Sanitarium
Reeder, C. L. .....Tulsa, Supt., Tulsa Hospital Association

PENNSYLVANIA

Turnbull, W. G. .....Cresson, Dir., State Sanatorium for Tuberculosis
Crookston, Col. Wm. J. .....Harrisburg, State Del., State Department of Health

SOUTH CAROLINA

Worth, Dr. J. M. ...Worth, Trustee, Medical College of South Carolina
Middleton, N. D. .....Spartanburg, Supt. of Nurses, Steedly Hospital
Whiteside, W. M. ....Columbia, Supt., South Carolina Baptist Hospital

TENNESSEE

Acuff, Herbert. .....Knoxville, Dir. Staff, Riverside and Knoxville General Hospital
Miller, Dr. S. R. .....Knoxville, Dir. and Treas., Riverside Hospital
Davidson, S. C. .....Memphis, Supt., Baptist Memorial Hospital
Gallagher, J. F. .....Nashville, Staff Member, St. Thomas' Hospital
Sanders, Dr. E. M. ...Nashville, Secy. Exec. Com., Protestant Hospital

TEXAS

Walker, Dr. Webb. .....Ft. Worth, City Health Officer
Rome, Dr. J. F. .....Waco, Health Officer, City of Waco

UTAH

Crossland, Mrs. F. W. .....Salt Lake, Supt., St. Marks' Hospital
Wyvill, R. R. .....Salt Lake, Supvr., Holy Cross Hospital

WEST VIRGINIA

Clark, Pliny O. .....Wheeling, Supt., Ohio Valley General Hospital
Goodman, H. L. .....McKendree, Supt., McKendree Hospital No. 2

VIRGINIA

McLeod, Josephine. .....Richmond, Supt., Johnston-Willis Hospital

WYOMING

Phifer, Dr. Fred W. ..Wheatland, Phys. and Surg., Wheatland Hospital

Guests

CANADA

Parras, Clarence B..Ottawa, Department Soldiers Civil Reestablishment
Bokers, J. H. W....Ottawa, Department Soldiers Civil Reestablishment

FLORIDA

Welsh, A. R.....St. Petersburg

GEORGIA

Byier, Albert D.....Atlanta, Wesley Memorial Hospital
Broom, J. M.....Atlanta
Clare, Mother M.....Atlanta, St. Joseph's Infirmary
Giltner, Martha J.....Atlanta, Grady Hospital
Crenek, Flora E.....Augusta, Wilhenford Children's Hospital
Evangelist, Sister M.....Savannah, St. Joseph's Hospital
Saville, Mrs. L. C.....Savannah, Park View Sanitarium

ILLINOIS

Irons, Dr. Ernst E.....Chicago
Yarn, Nettie M.....Bloomington
Bailey, Frank M.....Chicago, THE MODERN HOSPITAL
Carpenter, Helen.....Chicago, Englewood Hospital
Chapin, Mary K.....Chicago, THE MODERN HOSPITAL
Clark, Lucy J.....Chicago, Presbyterian Hospital
Colwell, N. P.....Chicago
Faecher, Henry G.....Chicago, Englewood Hospital
Faroll, Sara.....Chicago, Mount Sinai Hospital
Gromann, Ralph S.....Chicago, THE MODERN HOSPITAL
Wannamaker, M. B.....Chicago, THE MODERN HOSPITAL
Zimmer, Michael.....Chicago, Cook County Hospital

INDIANA

Essig, Maud F.....Elkhart
Lammers, Lucy A.....Ft. Wayne, Lutheran Hospital
Thelen, Marie L.....Lafayette
Bright, Ethel.....Madison, Supt., King's Daughters Hospital
Witner, V. R.....Marion, Grant County Hospital
Mix, C. M.....Muncie
Combs, Mrs. Chas. N.....Terre Haute
Brown, Mrs. LeRoy.....Terre Haute
Brown, Mrs. LeRoy.....Terre Haute
Austin, Mary B.....Columbus
Wiedner, J. M.....Aurora

IOWA

Cornelius, Sister M.....Davenport, Mercy Hospital
Mercedes, Sister Mary.....Davenport, Mercy Hospital
Longshore, Jas. H.....Dubuque
Rohlfing, Celina.....Sioux City, Supt., Lutheran Hospital

KANSAS

Theresa, Sister.....Salina, St. Barnabas Hospital
Helen, Sister Mary.....Salina, St. Barnabas Hospital
Moulder, Mrs. D.....Kansas City

KENTUCKY

Lambert, Roma.....Georgetown
Tuley, Mrs. H.....Louisville, City Hospital
Brosheer, Dr. C. K.....Middlesboro
Jenkins, Dr. J. O.....Newport
Grant, L.....Butler
Smith, R. L.....Covington

LOUISIANA

Sanderson, E. L.....Shreveport

MARYLAND

Way, Dr. J. T.....Baltimore
Wise, Helen V.....Salisbury, Supt., General Hospital

MASSACHUSETTS

Solomon, Dr. Sarah A.....Attleboro
Kaufman, H. L.....Boston

MINNESOTA

Olson, Miss Vendla.....Minneapolis
Rufswald, Sister Irene.....Minneapolis

MISSOURI

Kaplan, E. S.....Anglun, Jewish Home for Chronic Invalids
Rosalia, Sister M.....Kansas City, St. Mary's Hospital
Eulalia, Sister M.....St. Louis, St. Mary's Infirmary

MISSISSIPPI

Henry, Dr. Rolla.....St. Louis, City Hospital

NEW JERSEY

Davis, H. H.....Plainfield

NEW YORK

Polmer, S. F.....Rochester
Hastings, I. L.....Olsen
Power, I. A.....Hornell
Simoti, E. B.....Hornell
Ebrey, Edw. Rogers.....New York, Rockefeller Foundation
Holmes, Mrs. Geo. F.....New York
Bonner, B. H.....Buffalo, Chamber of Commerce
Johnston, Edw.....New York
Thomson, A. N.....New York, American Social Hygiene
Kremer, Dr. G.....West New Brighton, Sea View Hospital
Wilson, Mrs. R. J.....New York

OHIO

Albers, E. M.....Norwood, Good Samaritan Hospital
Carmichael, Grace M.....Amherst
Austin, E. C.....Cincinnati, General Hospital
Blawdine, Sister.....Cincinnati
Booth, E R.....Cincinnati
Burns, Hannah.....Cincinnati
Cocke, Elizabeth.....Cincinnati, Visiting Nurses
Dauch, Dr. S. B.....Cincinnati
Drach, G. W.....Cincinnati
Doane, Mrs. B. C.....Cincinnati
Ellen, E.....Cincinnati
Fredericks, E. M.....Cincinnati, Good Samaritan Hospital
Gelndenin, A. P.....Cincinnati, General Hospital
Fidelis, Sister Mary.....Lima, St. Rita's Hospital
Hentz, H F.....Cincinnati
Hilder, Rev Mother.....Cincinnati
James, M. B.....Cincinnati
Raymond, Sister M.....Cincinnati
Schapiro, Mary L.....Cincinnati
Scudder, John H.....Cincinnati, Ohio State Medical Board
Smith, L.....Cincinnati
Smith, Dr. E. O.....Cincinnati
Sowders, Miss Minnie.....Cincinnati
Stewart, M. B.....Cincinnati
Tibbles, E. F.....Cincinnati, City Hospital
Dean, Miss.....Cincinnati, College for Women
Shelton, Mrs. V. G.....Cincinnati
Wilson, M. B.....Cleveland, Rainbow Hospital
Southmayd, H. J.....Columbus, Ohio State Board of Health
Sellers, M. B.....Dayton
Benignus, Sister M.....Hamilton, Mercy Hospital
Cecelia, Sister M.....Hamilton, Mercy Hospital
Gertrude, Sister M.....Hamilton, Mercy Hospital
Gervase, Sister M.....Hamilton, Mercy Hospital
Gonzaga, Sister M.....Hamilton, Mercy Hospital
Grace, Sister M.....Hamilton, Mercy Hospital
Augustine, Sister M.....Hamilton, Mercy Hospital
Jerome, Sister M.....Hamilton, Mercy Hospital
Pierre, Sister M.....Hamilton, Mercy Hospital
Mary, Sister M.....Lima, St. Rita's Hospital
Allard, Lenore.....Portsmouth
Burch, Olga.....Sandusky, Good Samaritan Hospital
Schrver, Miss A.....St. Marys
Pittman, M. F.....Van Wert, Van Wert Hospital
Allen, Miss L. L.....Zanesville
Hilda, Rev. Mother.....Cincinnati
Jones, Minnie B.....Springfield, Springfield Lake Sanatorium

PENNSYLVANIA

Norris, Estelle.....Altoona
Walters, Margaret.....Clearfield, Clearfield Hospital
Alteneder, M. C.....Philadelphia, Children's Hospital
Virdin, A. C. Hamer.....Philadelphia, Roosevelt Hospital
Hamel, Mrs. H.....Westmoreland, Sunt., Mount Pleasant Hospital
Kachler, L. E.....Pittsburgh, Passavant Hospital
Pretzlaff, Sister Martha.....Pittsburgh, Passavant Hospital
Bishon, Mrs H. E.....Sayre
Ringsland, Miss Mary.....Waynesburg

SOUTH CAROLINA

Earle, Elizabeth.....Spartansburg, Steedly Hospital

TEXAS

Cornish, Miss L. E.....Port Arthur, Mary Gates Hospital
Taylor, Anne.....San Antonio, Physicians' and Surgeons' Hospital

VIRGINIA

Anderson, Mrs. H. S.....Dante, Clinchfield Hospital
Thacker, Miss S. V.....Roanoke, Lewis Gale Hospital

WEST VIRGINIA

Guthrie, J. A.....Huntington
Loffer, Jane M.....Huntington, Guthrie Hospital
Leathern, Margaret J.....Fairmont, Cook Hospital
Trimble, A. M.....Huntington

WISCONSIN

Conley, Anna.....Madison, University of Wisconsin
Leonard, Elsie P.....Madison, Chadbourne Hall
Reck, Agnes.....Milwaukee

DISTRICT OF COLUMBIA

Caldwell, Bert.....Washington, Public Health Service
Grady, Rev. J. O.....Washington, Catholic University
White, H. F.....Washington, United States Public Health Service

RULES FOR CONTINUOUS TUB BATHS

No Accident Can Possibly Occur If These Rules Are Closely Adhered to—Restraint Not Advocated, But Constant Surveillance Is Necessary

In an article on hydrotherapy in the *Oxford Medicine*, Guy Hinsdale reproduces the rules for continuous tubs in force at the Pennsylvania Hospital, Department for Mental and Nervous Diseases:

"1. Each morning before using baths fill them with the *hottest water* obtainable and record the temperature. Telephone to a physician if the temperature is over 120°. This always ensures a warm tub to start with.

"2. *Fill the tub* with water at body temperature before the patient is allowed to get in. Never fill a tub with a patient in it.

"3. The water in the tubs should be at *body temperature* (98° to 99°).

"4. Test the temperature every thirty minutes by placing your arm in the tub water *and* by taking the reading from a thermometer in the tub.

"5. After adjusting the temperature of a tub full of water, shut off the intake of water for about thirty minutes, then gradually adjust the temperature, if necessary. Do not keep a *continuous stream* going.

"6. Notice when a patient gets her ears filled with water. Thoroughly *dry the ears* when the patient is taken from the bath.

"7. Do not use *mechanical* help to keep patient in tub.

"8. *Do not leave* room while patient is in the bath.

"9. When patient leaves the bathroom, provide clothing, especially slippers, to avoid exposure to cold."

AMERICAN CONFERENCE ON HOSPITAL SERVICE MEETS AT CINCINNATI

Plans and Purposes of Organization Thoroughly Discussed—Activities Limited to Standardization Work Along Four Definite Lines—Adoption of Constitution and Election of Officers—List of Delegates in Attendance

WHILE members of the American Hospital Association and the American Dietetic Association were visiting the Cincinnati Medical School and attending various section meetings there on Thursday, delegates to the American Hospital Conference held morning and afternoon executive sessions in the Liberty Room of the Hotel Gibson. Here the plans and purposes of the organization were thoroughly discussed, officers elected (with the exception of a president), and a constitution adopted. It was decided to change the name to the American Conference on Hospital Service, and to limit its activities for the present to three or four definite lines. The subjects selected were the Intern Problem, the Nursing Problem, Standardization of Hospital Service, and the Medical Aspects of Social Insurance.

Certain organizations, because of their known interests, resources, and previous accomplishments, will be invited to nominate the chairmen of the various committees. It was decided that it should not be discretionary for the president to name these chairmen, even though the constitution empowered him to do so, since it is the wish of the Conference that its policy shall be democratic. In line with this policy, a representative of the American Medical Association will act as chairman of the committee on the Intern Problem; of the American College of Surgeons, as chairman of the committee on the Standardization of Hospital Service; of the American Nurses Association, as chairman of the committee on Nursing; and of the American Association of Industrial Physicians and Surgeons, as chairman of the committee on the Medical Aspects of Social Insurance. Any organization especially interested in any one of these particular subjects will be entitled to membership on the committee having that subject in hand, and it is the desire of the conference that such members of the conference as are interested in the work of any particular committee will become members of that committee.

The work of the constituent organizations in the hospital field will not in any way be inhibited, duplicated, or supplemented by the central organization, but it is, of course, assumed that the work of all of the organizations will be more or less modified as the result of the activities of the various committees of the Conference.

When the committees are fully organized, they will be expanded by the inclusion of honorary members who are not delegates but who can make substantial contributions to their work. This arrangement makes it possible for each committee to acquire the help of any man or woman who may have distinct contributions to offer.

No one is yet in a position to say whether the American Conference on Hospital Service will undertake original investigations through its own staff. The opinion of the delegates, in general, seems to be that there is no immediate need for the creation of such a staff. Should such investigations be contemplated, the decision to move them will rest with the whole Conference, this action to be taken at a regular meeting. No such decision is likely to be made, however, until it shall appear in the course of the work of some of the special committees that such investigations are necessary. Individual members of the Conference are optimistic regarding the ability of the organization to secure funds for special investigations when they are considered necessary.

Because of the opinion that the organization is so pregnant with possibilities that the selection of a president is a matter of grave concern to the entire country, the delegates were unwilling to proceed hastily in selecting him. An effort will be made to find the man best fitted for the position and recommendations will be reported at the next meeting. This will be held in Chicago the first week in March, when the four committees already mentioned will make their first report. At that time, moreover, the work will, undoubtedly, be further developed by the appointment of additional committees to take up other lines of endeavor.

Some of the subjects already suggested are the training of clinical aids, post-graduate teaching for medical practitioners, the development of hospital social service work, the training of men in medical administration, the formulation of a combined hospital and public health program, and the framing of a plan for the application of the principle of group medical practice in medical institutions.

The officers elected, with the exception of president, who, as already indicated, will be selected later, are: First vice-president, A. R. Warner, M.D., Superintendent Lakeside Hospital, Cleveland (American Hospital Association); second vice-president, Miss Clara D. Noyes, Bureau of

Nursing, American Red Cross (American Nurses Association); treasurer, Harry E. Mock, M.D., Chicago, American Association of Industrial Physicians and Surgeons; trustees, for three years, Dr. S. S. Goldwater, Mount Sinai Hospital, New York City (American Hospital Association); Dr. John G. Bowman, Chicago (American College of Surgeons); Dr. John M. Dodson, Dean Rush Medical College (American Medical Association); trustees, for two years, Father Charles B. Moulinier, Marquette College, Milwaukee (Catholic Hospital Association of United States and Canada); Miss Edna G. Henry, Social Service Department, Robert W. Long Hospital, Indianapolis, Ind. (American Association of Hospital Social Workers); Dr. Roger Morris, Association of American Medical Colleges, University of Cincinnati Medical School; trustees, for one year, Col. James D. Glennan, U. S. A. Medical Department, U. S. Army; Dr. David S. Strickler, Denver, Colo., Federation of State Medical Boards of United States; Senior-Surgeon J. H. White, Medical Department of United States Public Health Service.

Constitution and By-Laws of the American Conference on Hospital Service

(As Adopted at the Cincinnati Convention, September 11, 1919)

CONSTITUTION

ARTICLE I NAME:

The name of the conference shall be the American Conference on Hospital Service.

ARTICLE II OBJECT:

The object of the American Conference on Hospital Service, hereinafter referred to as the Conference, shall be the betterment of hospital service in the United States of America and the Dominion of Canada.

ARTICLE III ORGANIZATION:

Section 1. The Conference shall be composed of two duly accredited delegates hereinafter called delegates, from each of the following named organizations: American Association of Industrial Physicians and Surgeons, American Association of Hospital Social Service Workers, American College of Surgeons, American Hospital Association, American Medical Association, American Nurses Association, Association of American Medical Colleges, Catholic Hospital Association of U. S. and Canada, Federation of State Medical Boards of U. S., International Compensation Board, Medical Dept. of the U. S. Army, Medical Dept. of U. S. Navy, National League of Nursing Education, National Organization for Public Health Nursing, and U. S. Public Health Service, and of two representatives of any other organization that may hereinafter be elected by a two-thirds vote of the whole number of delegates, which shall be recorded by means of signed ballots.

Section 2. The participation of any organization in the Conference shall be terminated by a two-thirds vote of the whole number of delegates which shall be recorded by means of signed ballots.

Section 3. The Conference may elect or may delegate the power to appoint honorary members. Honorary members shall have the privilege of the floor at all sessions, and may serve on committees, but shall not be entitled to vote or to hold office. Unless otherwise designated by the board of trustees all honorary members shall serve for one year from date of election.

ARTICLE IV OFFICERS

Section 1. The officers of the Conference shall be president, first and second vice-president, treasurer, and board of trustees, as herein provided.

Section 2. The above officers, other than the board of trustees, shall be elected at the annual meeting, shall assume their duties at the close of the meeting, and shall serve until the close of the annual meeting next succeeding, or until their successors are regularly elected and installed.

ARTICLE V TRUSTEES:

Section 1. There shall be a board of eleven trustees which shall have charge of the property and financial affairs of the Conference, and shall hold title thereto under the name of "Trustees of the American Conference on Hospital Service."

Section 2. The president and treasurer shall constitute two of said trustees and three trustees shall be elected annually to serve for three years, except that in 1919 three of said trustees shall he elected for one year, three for two years, and three for three years. Trustees shall serve until their successors are elected.

Section 3. The Board of Trustees shall, always subject to the vote of the Conference, have general control of the management and business of the Conference, and may appoint and fix the salaries and assign the duties of an executive secretary and of such other officers and agents as it may be necessary.

ARTICLE VI VACANCIES:

Section 1. Any vacancies occurring between the regular annual meeting in the office of the president, vice-presidents, treasurer or Board of Trustees shall be filled temporarily by vote of the Board of Trustees and appointees, thus designated shall hold office until the next annual meeting, or until their successors are elected.

ARTICLE VII AMENDMENTS:

Section 1. The constitution may be amended by a majority vote of the delegates, provided, however, that no amendment shall be acted upon unless thirty days' notice of the proposed action shall have been given.

BY-LAWS

ARTICLE I:

There shall be an annual meeting of the Conference held at a time and place fixed by vote of the Conference, or, if the Conference fails to specify a day and place, the time and place shall be fixed by the board of trustees.

ARTICLE II:

Special meetings may be called by the president upon the written request of ten delegates. The president shall give notice of not less than thirty days before the proposed time of the meeting to each delegate of the Conference, which notice shall also explain the object of the meeting.

ARTICLE III:

A quorum shall consist of not less than twelve delegates.

ARTICLE IV:

Section 1. All officers shall be elected by ballot.

Section 2. The majority of the vote cast shall constitute an election.

ARTICLE V DUTIES OF OFFICERS

Section 1. The president shall preside at all meetings of the Conference and of the board of trustees. He shall appoint all committees, unless by vote of the Association, other provision shall be made. He shall be, ex officio, a member of all standing and special committees.

Section 2. The vice-presidents shall in the order of their rank, in the absence of the president, perform his duties.

Section 3. The treasurer shall receive all moneys of the Association and shall deposit and account for the same, under the direction and control of the board of trustees. He shall give to such board such bond as it shall determine for the faithful performance of his trust. Such bond shall be in the custody of the president. All disbursements and expenditures shall be made under the direction of the board of trustees and subject to its rules and requirements. The treasurer shall keep proper books of account and shall present a report of the finances of the Association at the annual meeting.

ARTICLE VI DUES:

The annual dues of the Conference shall be $25.00 payable by each organization represented in the Conference. The dues of any organization may he remitted by the board of trustees.

ARTICLE VII:

These by-laws may be amended at any regular or special meeting by a vote of not less than two-thirds of the delegates present and voting.

DELEGATES IN ATTENDANCE

Of the total number of delegates appointed, the following were in attendance at the Cincinnati meeting:

Brown, D. Chester, M.D., Danbury, Conn., American Medical Association.

Mock, Harry E., M.D., Chicago, American Association of Industrial Physicians and Surgeons.

Caldwell, Bert W., M.D., Chicago, U. S. Public Health Service.

Dodson, John M., M.D., Chicago, American Medical Association.

Parsons, Sara E., Boston, National League Nursing Education.

Embree, Edwin R., New York City, Rockefeller Foundation.

Lewinski-Corwin, E. H., M.D., New York City, New York Academy of Medicine.

Logan, Laura R., Cincinnati, American Nurses Association.

Robinson, Gwynn, Cincinnati, U. S. Public Health Service.

Sister M. Genevieve, Youngstown, Ohio, Catholic Hospital Association.

Cameron, Mary A., Philadelphia, American Association Hospital Social Workers.

Pearson, Harriet, Chattanooga, Tenn., Erlanger Hospital.

Walsh, Dr. Wm. H., Washington, D. C., Public Health Service.

Stewart, P. M., Washington, D. C., U. S. Public Health Service.

Kramer, Floyd, Washington, D. C., Lt. Col., Medical Dept., U. S. Army.

Dear, Lt. Col. W. R., Washington, D. C., Surgeon Gen., U. S. Army.

Woodbridge, Capt. C. H., Washington, D. C., U. S. Army, Surg. Gen.

One part of the scheme of living is to learn just what our responsibility is and to let other people's alone.—Harriet Beecher Stowe.

Banish the tears of children. Continual rains on the blossoms are hurtful.—Jean Paul Richter.

The way to heaven always lies by your neighbor's door

AMERICAN DIETETIC ASSOCIATION MAKES REMARKABLE GROWTH

Progressive Spirit Shown in Handling Hospital Problems — Association may become Clearing House of Communication for Hospitals and Dietitians — Standardization of Curricula for Nurses' Training Schools Advocated

The second annual convention of the American Dietetic Association was held at the Hotel Gibson, Cincinnati, September 8-12 in conjunction with the American Hospital Association and the American Hospital Conference.

The usual presidential address was dispensed with in order that the members of the American Dietetics Association family might talk confidentially together. In opening up the meeting, Miss Lulu Graves, the president, gave a brief review of the history of the organization. Miss Graves said:

"There has been a great development in the past year in the American Dietetic Association; because we are so young and have grown so rapidly, we are experiencing those things which are found only where there is unusual growth. So we must do some remodeling and reconstructing in order to form a foundation for growth in the future. Each one of you is admonished to think of those things which will better the American Dietetic Association and bring these ideas to the front. We want to accomplish a great deal in the next few days.

"Two years ago, a small group of struggling dietitians who felt we needed each other's help met for a conference in Cleveland. At this conference an organization was formed. Officers were elected and a constitution was drawn up. Today we have nearly three hundred members —not only dietitians, but many nutrition experts. Every college which teaches nutrition has a representative member. This shows the wide scope of interest taken in dietetics and the work of the dietitians. This week some action must be taken so that it will be possible for the various state and city associations to affiliate in a way with the American Dietetic Association. We must consider what we can give them, and how we shall dispose of it.

"Secondly, we must have a discussion in regard to the different phases of the work represented and how this work shall be designated. Last year, at Atlantic City, there was a section for hospital dietitians subdivided: (1) (a) executive, (b) special diets; (2) teaching (a) in colleges, (b) in hospitals; (3) administrative dietitians (a) cafeterias, (b) lunch rooms; (4) dietotherapy, or metabolism.

"During the past year there has been much development. This classification is not what it should be. We must think over this and discuss it.

"There is a need of a definite standard for dietitians. The chief object of the American Dietetic Association is to help the dietitian solve the dietitian's problems and to help the hospital solve the dietitian problem.

"We may be compelled to make the association a 'clearing house' of communication for hospitals and dietitians. As yet we have no office, no publication, so that this work is largely done by the American Dietetic Association. Every dietitian wants to know what the other dietitians are doing and each hospital wants to know what other hospitals are doing. We can be helpful to each other. There should be a reliable source of information for the members, such as new publications and new equipment with which not every hospital is able to keep up. We must be thinking how to solve these problems. Also, the problem of finances must be solved. Two years ago we had nothing. The members' dues were made $1. As this did not meet the expenses, last year the dues were raised to $2. We have adopted a scheme of exhibits which is very educational. No one knows better than the man who sells the foods and equipment about his own implements; so get informed about what the men are selling. Do this for yourself, for the association, and for the exhibitors who have helped to finance the meeting."

As Miss Annie Goodrich, former dean of the Army School of Nursing, was unable to present her paper, Miss Edna White, head of the department of home economics at Ohio State University, gave a short report of the home economics meeting held at Blue Ridge in June. Because the Southern people have never had a home economics meeting, Blue Ridge was selected as a meeting place. About two hundred representatives from all the Northern and Mississippi Valley states were in attendance. This meeting was unique in that we had never met before for a whole week. A meeting next year will probably be held in Colorado, the third week of June.

Miss Perry, formerly dietitian at Michael Reese, Chicago, who has just returned from overseas, said that in France the dietitians had many problems to solve. Some had modern kitchens; some had merely an apology for a kitchen and no equipment. There was a wide variance in the mess officers, too.

"A dietitian is not a cook" according to the bulletin issued. There have been many nurses in other wars but no dietitians; neither our opponents nor our Allies had dietitians, so that there was no real place for the dietitian except as she made it herself. The nursing force sometimes cooperated and sometimes not.

"Some hospitals were fortunate enough to have two dietitians, as it is impossible for one person to take charge of all the food, the special diets and the ward supervising. The government had planned for one big kitchen with the diet kitchen on one side of the big kitchen, but this seemed not satisfactory, so we established a diet kitchen and equipped it with the necessary table and stove. From this diet kitchen all the light, liquid, and special diets were served. While the dietitian is not a bookkeeper, and does not work under the mess officer, still she should not run the mess officer in debt."

Tuesday, September 9, Morning

A paper by Mrs. Katherine Fisher, Teachers College, New York City, "Courses of Instruction for the Training of Dietitians," will be published in a later issue of THE MODERN HOSPITAL.

Miss Cooper, in discussion, rejoiced that Columbia takes the stand that academic credit be given for practical work as a three months' hospital course under proper supervision. She did not believe that dietitians can be properly trained in less than two years. About half their lives should be spent getting ready for this profession. The preparation needed in college depends upon the type of work to be done when the dietitian leaves school. Distinguishing names should be applied to different types of work done. As not every nurse who becomes a graduate nurse is necessarily fitted to be a superintendent of nurses, so not every dietitian is necessarily fitted to be a supervising dietitian. It is an injustice to the profession to permit this wrong to go on. As supervising dietitian in

the army, Miss Cooper found a great difference in the training of dietitians. The lack of success of the army dietitian was due usually either to lack of personality or to lack of training. A questionnaire was sent to the six hundred schools where dietitians were trained. Three hundred replies were received, one-half of which were rejected because of some uncertainty as to whether term or semester credits were meant. From the one hundred and twenty-five questionnaires used the following information was obtained: One college required no chemistry. One college required thirty-four credits. Two colleges reported that no biology was required. There was a wide variation in economics and psychology. In household science, from the universities, a minimum was four-hours' credit and a maximum thirty-one hours with an average of seventeen hours required. From the colleges, sixteen hours was the average. From the normal schools, seventeen hours was the average and from the special schools, as Pratt, seventeen hours was the average. In institutional management, eighteen universities gave no institutional training, but five credit hours was the average. The normal schools averaged two hours, and the specials, three hours. There is a great difference in the training of dietitians. The time is not yet ripe for state registration of dietitians.

In the discussion Miss Graves remarked that she had found pupils lack housekeeping experience. They don't know what kind of soaps, etc., to use on equipment.

It was further brought out in discussion that a dietitian can not be expected to do metabolism work with no more than two years in chemistry, but that the course planned is for the average dietitian, not the specialist. Metabolism work needs a different type of training.

Miss E. M. Geraghty, New Haven Hospital, read a paper on Training of Pupil Dietitians. Last year she sent out a questionnaire which brought in very varied reports. The consensus seemed to be that a dietitian was a person with a good disposition and with an unlimited capacity for hard work. The courses offered for pupil dietitians in hospitals should be standardized so that the home economics departments could send the proper girl to the particular type of hospital. The student dietitian should not be required to do clerical work; after she has learned how to do the work, she should not take the place of a paid supervisor, as in the serving room or diet laboratories. Student dietitians should have a chance for civic opportunities, as the use of books and magazines. A dietitian has sometimes been called a paper worker, because she does no actual work. Since October 1, 1918, Miss Geraghty has had no pupil nurses in the dietitian kitchen. Student dietitians get out special diets and compute the value of all these diets but do not make custards, gelatine, etc. In this case, the prime consideration was to run the diet kitchen. Miss Geraghty keeps the pupil dietitian two months in the diet kitchen, during which time she serves trays on the ward; and three months elsewhere. They did such good work that the medical board became interested and helped in the preparation of an outline for their course. We consider the special needs of the hospital patient.

Dr. Wylie, St. Agnes Hospital, Pontiac, Wis., said that his idea of a dietitian was that she should have complete control of all feeding in the hospital. She should see that the work is carried out from kitchen to garret. Forty-five per cent of the expense of the hospital is for food. Next to the chief of staff, the dietitian's position is the most important. Turn over the whole department to the dietitian and relieve the superintendent.

Miss Graves remarked that the inclination to give the competent dietitian complete charge is growing, and that the immediate need is to furnish the training for this kind of work. Miss Graves does not know where this course is offered.

STANDARDIZATION OF CURRICULA FOR NURSES' TRAINING SCHOOLS

An outline for curricula for nurses' training schools was presented for the members to look over. Miss Ruth Shelow requested suggestions for the reorganization and readjustment of this outline. As it seems necessary for the dietitian to teach dietetics to the pupil nurses, we must furnish her with the best possible outline for this work. The time consumed in this teaching must not be out of proportion to the time consumed by other studies in the nurses' curriculum. As for textbooks, it was agreed that, while Miss Proudfit's "Dietetics for Nurses" was the best on the market, still it might not fit all cases. The nurses' classes include young women of widely differing training, some from high schools and some with college training. Suggestions about the teaching of diet and disease are needed. Nurses must have a workable, usable knowledge of nutrition. They must be able to pass the state board examinations.

STATE BOARD (NURSING) REQUIREMENTS IN DIETETICS

This paper, by Miss Helen Wells of Drexel Institute, is published in full in the Department of Dietetics in this issue of THE MODERN HOSPITAL.

In discussing this paper, Miss Drew, Northern Pacific Hospital, said that "in Minnesota no two dietitians are teaching the same course. It is necessary to follow the state board questions closely and teach many non-essentials in order that the nurses may pass these examinations."

Mrs. Mehlig suggested the use of Miss Graves' "Hospital Dietetics" for an outline for a nurses' curriculum, but Miss Graves reminds us that this book was written even before the American Dietetic Association was formed and that today she herself would not use it. Moreover, it was written for dietitians primarily. She suggested that the following publications might be helpful to dietitians both in their work and in preparing nurses' lectures: Emerson, "Essentials of Medicine"; Carter-Howe & Mason, "Nutrition and Chemical Dietetics"; Smith, "What to Eat and Why." This latter book can be put into the hands of nurses, but Miss Proudfit's book comes as near meeting the situation as any.

Miss Wells suggested that the rapid changes in dietetics makes it impractical to have a textbook for nurses. Lectures and references are more satisfactory.

Miss Graves suggested that dietitians will find very good articles in the *Journal of the American Medical Association*, the *Journal of Biological Chemistry*, *Hospital Management*, and THE MODERN HOSPITAL.

Miss Wells moved that the president of the American Dietetic Association be empowered to appoint a committee to draw a plan for curriculum for nurses' training in dietetics and present it to the National Committee on Nursing Service.

After a short discussion, it was concluded that the instructor already employed by the training school was sufficiently busy and perhaps not qualified to teach dietetics.

Miss Graves made the following announcements: nominating committee: Miss Brinker, chairman; Miss Owens, and Miss Edna White (new member); committee on nomenclature: Miss Conley, chairman (to select her own

committee); committee on standardization: Miss Maude Perry, chairman (to select her own committee); selection on social service: Miss Blanche Joseph, chairman.

TRAINING OF SOCIAL SERVICE DIETITIANS

This paper, by Miss Emma Winslow, Charity Organization Society, New York City, is published in full in the Department of Dietetics this month.

SOCIAL SERVICE DIETETICS AS APPLIED TO WORK WITH JEWISH FAMILIES

Mrs. Mary L. Schapiro, director, Bureau of Home Economics and Dietetics, gave a review of the effect of industrial revolution upon the home and women, showing how, after a woman has been in industry, it is hard for her to adjust herself to housekeeping when she marries. This is more noticeable among untrained women than among trained women. While the teachers in our public schools teach the children cooking, because they do not know the code of dietetic laws and customs of the Jewish people, they do not adapt their teaching to this code. Miss Schapiro then gave us an outline of all the dietary peculiarities of the Jewish religion, showing that these laws were primarily for sanitary and hygienic good of the people, but, in order that they should be followed, they were made a part of the religion. When the poor try to live by these laws, an unbalanced ration results. The food is over-rich, over-spiced, and over-seasoned. We have more gastric disturbances among the Jewish people than among any other group. While the Jewish women are very good cooks, they need training in the art of menu-making, so that they will get more minerals in their diets. The Jewish social service dietitian attempts to teach this as tactfully as possible. For the health of the community is dependent upon the health of the individual.

Wednesday, September 10, Afternoon

GENERAL SESSION

This session was opened by Dr. Elizabeth Campbell, of the Cincinnati General Hospital, who, after tracing her different interests in dietetics through the years, called attention to the fact that the medical fraternity is now realizing the value of the dietitian as an assistant in treating the sick. She thinks, however, that the doctors still have much to learn in regard to dietetics. Formerly, medical men seemed to think that if the nurses knew too much, they might encroach upon the medical professon, but now the doctors and nurses are rapidly becoming co-workers. The dietitian, too, should become a co-worker with the physician and the nurse.

Dr. Campbell considered these relations from four different standpoints: First, that of the patient; second, the dietitian; third, the doctor; and fourth, the hospital.

One of the first questions many patients ask is, "What shall I eat?" Dr. Campbell suggested that the "devil enters the hospital through the hospital trays." Dietitians ready and skilled are waiting to be used; but upon reaching the hospital they suffer from disillusionment. Instead of being an assistant to the physician, they are expected to serve food to the patient, make this food palatable, attractive, and cheap.

The practicing physician has little time to delve into the details of dietetics and after the diagnosis is made, it would be a great satisfaction for him to call for help from the dietitian. She should be found, not among the pots and pans, but upon the floors of the hospital, where she may cooperate with the staff.

If there is not a dietitian, the staff should demand one. Since physicians write prescriptions for medicines, why not write prescriptions for diets? Aside from those diseases, such as diabetes and typhoid which are usually treated dietetically, there is a vast number of neurasthenic patients who could also be treated, for a large part of their discontent lies in the alimentary canal.

From the hospital standpoint, a dietitian on the floors should be a good thing. Much of the food on the trays is not eaten, thus occasioning waste. If the dietitian were on the floor, she could watch the feeding cases.

Summarizing, the physician should write diet prescriptions. The staff should demand a dietitian and get their hospital into line for one. And, finally, there should be a field for dietitians as assistants to doctors in their private practice. Dr. Campbell closed her address by welcoming the younger dietitians into the fraternity.

Thursday, September 11, Morning

This session was held on the roof garden of the nurses' heme of the Cincinnati General Hospital. The members of the association were shown through the hospital by the dietitians and nurses of the institution and everyone enjoyed this opportunity of becoming acquainted with a very well organized and equipped hospital.

Miss Hyde, dietitian of the Cincinnati General Hospital, presided.

Miss Foley, who has been at Fort Riley, Kas., gave a very interesting talk on her work there. She said that the hospital had a capacity of 3,000 and extended over a large area. There are in all thirteen buildings with a kitchen and mess hall in each, thus making the problem of serving the meals a difficult one. There was a mess sergeant in charge of each mess hall, who took care of the ordering, policing and detailing of work for all the regular diets.

The dietitians had charge of the menus for the special diets, and had diet cooks sent to them. As these men were often sent for punishment or because they were poor K.P.'s it was difficult for the dietitians to get their work properly and efficiently done. The patients were getting baked beans, pie and doughnuts just the same as the men who were up and exercising. So Miss Foley and Miss Lincoln, another dietitian, asked that they be allowed to experiment with two sections. Miss Foley took charge of the special diets, and found the work very interesting. At first the soldiers found it hard to take orders from a woman, but when they found that the materials they wanted were always on hand, and that there were fewer kinds of things to be prepared, they grew to like the new régime. This section at first took care of from fifteen to twenty different kinds of diets, and when the inspector came around it was declared to be the cleanest and best organized section. The soldiers liked the plan so well that seven sections were given over to the work, and more could have been reorganized if the necessary dietitians had been available. The hours at first were regulated, eight hours a day being the ordinary work day, but later the dietitians were allowed to govern their own time.

Miss Foley also told of the cooking classes she had at night for the mess sergeants and the K.P.'s, as well as for the nurses in the army training school. She is certainly to be congratulated on the success of her work.

Miss Graves in telling of Miss Foley's work, complemented her most highly on what she had accomplished, and said that the hospital at Fort Riley was the only place in the army where the dietitian had been given full charge.

Miss Swope, of the Cincinnati General Hospital, next told us, in a very interesting manner, of her work overseas with Base Hospital No. 25. She started her work

in the army at General Hospital No. 1, in New York, and after a brief period of service here went overseas. The unit to which she belonged, she told us, had a thousand-bed capacity, but they took care of over 1,900 cases. All of the food came from the mess hall, and they had in the kitchen seven army ranges, and two in the diet kitchen. The arrangement of the equipment and the organization in the kitchen were very discouraging, and for the first day or so, the dietitian seemed to have no place to work in. It was hard to get supplies, and hard to change the type of the menu, but Miss Swope told in a most interesting manner of the way these difficulties were met and overcome. The cooking utensils often consisted only of new garbage cans, but excellent use was made of fence posts as potato mashers or even rolling pins. When they arrived at the hospitals, soldiers were served hot coffee, and then, after seeing the surgeon, received the diet prescribed. The stoves were dumped and cleaned daily in order to make most use of the coal, as it cost them a hundred dollars a ton.

Following this talk there was a discussion of Dr. Bauman's paper, read the preceding evening. Dr. Bauman told, as he believed, that better results are obtained now in diabetes when alkalis are not used. The method now is to reduce the amount of fat in the diet, as when this is oxidized it tends to produce acids, and, when acids are formed, coma results. Joslin now blames himself if his patients go into coma, because he feels that the treatment and diet should make them live even longer. Dr. Bauman passed around a chart showing the method of feeding diabetic patients, starting the diet on high carbohydrate, and low fat, and gradually reducing the amounts of food until finally there is a fast day, and then when the diet is again resumed the carbohydrate content is greatly reduced and more fats are given. In these experiments the acidosis was reduced as was the sugar content of the urine, until both were negligible.

Miss Smith of the Presbyterian Hospital asked how the patients were taught to continue their diet, and Dr. Bauman replied that they are given Joslin's hand book for patients, and taught to examine their own urine. If there were more of them he would advocate Joslin's plan of having classes for the patients about twice a week.

Miss Graves asked whether diabetes in children is more serious than in grown ups, and Dr. Baumann said that with children there is the consideration of growth as well as of maintenance. Several cases he has been treating, however, show marked improvement. The danger coming from infections and contagious diseases must be considered. These children need a healthy climate in order that the dangers may be minimized. Dr. Bauman does not advocate the use of a salt free diet unless edema is present. Another interesting point is that he does not advocate the use of saccharine, but rather of levulose. Previous to the introduction of a 25 per cent solution of levulose intravenously before an operation, they used to give their patients candy, which reduces the acidosis and makes the chances of recovery from operation greater.

Miss Eckman asked whether Dr. Bauman could give any explanation of the fact that patients lose moral courage and steal foods they should not have. Dr. Baumann said that, in general diabetic patients are underfed, and it is a physiological condition rather than pathological which gives them this tendency to use forbidden foods. Miss Eckman also told of a case where the patient could stand no carbohydrate at all but could consume 60 grains of levulose.

Dr. Bauman said that, in general, on starvation days he did not advocate the use of thrice cooked vegetables. Miss Oliver asked about the use of diabetic flours, as soy bean, and lyster, and Dr. Bauman replied that if one can be sure they contain no starch they are all right.

Instruction was given in making bran biscuits, by thoroughly washing the bran and then sticking it together by the use of egg white. Two egg whites, one beaten stiff and folded in, the other mixed directly with the bran, serving to moisten three cups of bran. Miss Phillips spoke of giving their patients bran and ager muffins on starvation days.

Miss Graves brought up the question of the difficulty of doing without pie, and asked for suggestions.

Miss Cooper told of the use of jellies made from agar-agar.

Miss Wood of the Food Clinic of the Boston Dispensary told us a little about her work, especially with diabetics. Her cases come mostly from Jewish families although they have other nationalities as well. The students of Simmons College do some follow-up work, going into the homes and teaching cooking to the mothers. The great thing to be observed is to give them a diet which accords with the customs of the race.

Miss Wood also told of a pie they have made of the bran muffins, and lemon jelly with meringue, sweetened with saccharin. Of course it doesn't entirely take the place of pie, but it is a step towards helping.

The families who need the lowest cost dietaries, and can't afford the diet suggested are helped by the relief organization. Only a small percentage of the cases are living on a very limited caloric diet, and those who need to go to bed are referred to the Peter Bent Brigham Hospital.

Miss Wood does not advocate the use of canned vegetables, but rather uses fresh vegetables entirely. The families in her care are taught how to wash the bran and how to prepare their own diets. They are taught sight measurements of portions, as they have no scales. There are two languages which the social service dietitian must learn, first that of the doctor, which is not hard, and second that of the patient, which has never been standardized, and is different for each case.

Miss Graves closed the meeting by giving a few announcements. A cordial invitation was extended to the American Hospital Association to attend the evening session.

Thursday, September 11, Afternoon

General Session

This session was held in the convention hall of the Sinton. Dr. Walsh, of the Hospital Division of the Public Health Service, gave a paper on the dietitian in that service, which will appear in a later issue of The Modern Hospital.

The next paper was given by Colonel Murlin of the University of Rochester. Owing to the fact that there was no operator for the moving picture machine, the paper on "Food Supervision of the Army" was replaced by the paper on "What We Have Learned in Dietetics in the Army."

Dr. Murlin told of the various wars before, when there was always something wrong with the food supply. In the Revolution, it was a lack of food, and in the War of 1812, we were slaves to the contract system which resulted in a lack of good food, and a widespread epidemic of scurvy. In the Mexican War, our soldiers lived on fresh vegetables, fruits, and wine found in the country where they were fighting. In the Civil War, the medical

MISS LULU GRAVES
President
American Dietetic Association

department shared the responsibility for the first time, but this authority was not granted until 1863, and previous to this time, there was much scurvy. In the Spanish-American War there was poisoning from canned foods, and from failure on the part of the army to handle the food properly.

In this war, Surgeon-General Gorgas has had the camps thoroughly inspected with the following results:

1. The average requirements for soldiers in training and in the field have been determined—about 3,600 calories being the average, with a range of from 3,200 to 4,500 calories.

2. We know how much the soldier eats outside, and how much he will eat at mess. This outside food is provided by the Red Cross, other social organizations, and by interested friends.

3. We know the average daily consumption of each food of the rations, so that now there is an accurate provision of food based on actual consumption.

4. We know the average composition of the food eaten, namely, 14 per cent protein, 31 per cent fat, and 55 per cent carbohydrates.

5. We know the variation in the food consumption in different seasons due to loss of heat from body, and the need for more heat in winter, the difference being 400 calories.

6. We know the variation in the food consumption in different battalions of the same company, and the same battalions at different intervals. Here, we take into account the psychology rather than the physiology.

7. We know the average consumption of the different classes of patients in the hospitals.

8. We have learned of the preponderance of the acid ash in the rations which with the muscular fatigue is apt to produce acidosis; therefore any corrective diet must be basic, so we cut down the amount of meat and give fresh milk, fruits and vegetables.

9. We know the *possible* relationship between the diet and the susceptibility to disease.

The method of washing dishes in the army was changed from using three tubs of water which was boiling to begin with and quite cold towards the end, to having all three tubs kept boiling so that the dishes were sterilized; and it is thought that this change checked the spread of influenza.

Rations at the beginning were excessive: For instance, meat rations which formerly were 20 ounces per man per day were reduced to 13½ ounces per man per day. The ration of potatoes per man per day was reduced from 16 ounces to 13 ounces, and bread was also greatly reduced. On the other hand, there were not enough beans, fruit, coffee, butter, and some other things, showing that the ration needed to be changed. Instead of allowing the companies "savings" which meant that they could save from the amount alloted to them, and buy more of the things needed, all the savings had to go through the quarter-master's department. Rather than do that,

MISS E. M. GERAGHTY
Secretary American Dietetics Association
New Haven Hospital, New Haven, Conn.

the mess sergeants spent all their money and the food was wasted. This encouraged waste rather than efficiency.

It was hard to feed patients as they should be fed, because of this new order, and often orders were disobeyed because doctors wanted their patients to have certain foods.

In certain camps, waste was reduced to a minimum. In Camp Devour, for instance, in eight batteries, in eight days, with 1,600 men, there was absolutely no waste. Camp Custer Base Hospital has the record for the lowest percentage of waste of any hospital.

Miss Graves spoke of the meeting in the ball-room Friday morning and of the business meeting in the afternoon.

Dr. Test, of Philadelphia, told of a diet list they have,

printed in 1751, which provides for cheese and mutton, and bread and beer without water for three meals.

Social Service Section

Discussion of the Social Service Section was held on the Mezzanine floor following this meeting. The discussion was opened by Miss Joseph who told of her social service work in Chicago. She spoke of her course for student dietitian, which has been previously outlined in The Modern Hospital. Her students go to the clinic and follow up the cases in the homes later. Cases are referred to them through the Board of Education, through the hospitals, and through the charity organizations.

Miss Eichelberger, of Louisville, Ky., spoke of a plan of furnishing a cottage and conducting nutrition classes there. The children are given two meals a day; the progress is recorded on charts; and an attempt is made to reach the mothers in this way. Miss Joseph showed charts she had made in her classes, showing the attendance, the application and the increase in weight. She said children are interested and anxious to please. Miss Winslow suggested that the plan in Kentucky could be improved by trying to reach the children through education as well as through feeding, but the work should not be done entirely through the charity organization. In Chicago, Miss Joseph said, the charity organizations provide extra money for the special feeding cases, where the family have not the means.

The section decided to send a resolution to the proper committee to take up the question as to the qualifications of a social service dietitian, and of what her training should consist. It also referred to the Committee on Standardization that all courses longer than two years should require some social service training of their institution dietitian.

Miss Buell, instructor in nutrition and dietetics at Wisconsin University, said that their department was trying to get into closer co-operation with the University Medical School. She wished to know what opportunities were open and what course girls should take in college in order to get into these various fields. Miss Joseph has been taking students in the summer months who are undergraduates and giving them a chance for this field work; in the winter, she takes graduates. In order to give university credit for such field work, it is necessary that the student have more time to devote to it. Miss Joseph also said that her students had taken care of sixty-five families, visiting whenever necessary, working with a pathologist, and doing all the other necessary work. She feels the dietitian should give her student something very definite and should try to give her as many viewpoints as possible. Miss Winslow said that, in the field work at Teacher's College, the students were required to keep a diary, and that the credit was given on the basis of the amount and type of work done. Miss Joseph's pupils make visits with the social worker, welfare worker, the nurse and the dietitian, and work also at the hospital dispensary. The children in her classes are from eleven to thirteen years old and next year she expects to have about two hundred, between six and thirteen. She teaches them how to live, what to do and what to eat. In general, her work is of a preventative nature. She gives a different clinic each morning and finds her results very satisfactory.

Thursday, September 11, Evening

General Session

Miss Clara D. Noyes, acting director of the department of nursing, American Red Cross, Washington, D. C., said that the history of the dietitian in the Red Cross dates

Second Vice-President, Miss Margaret Deaver, Mt. Sinai Hospital, Cleveland, Ohio.

from the summer of 1916. There was in Washington a National Service School under the Navy League—a school preparatory for military service, although this country was not yet in the war. The Red Cross gave courses in Home Hygiene and Home Care of the Sick, and a short course in invalid cookery, usually three to five lessons. When the Red Cross received requests for similar courses, it was decided to publish a book. Miss Fish prepared "Home Dietetics," which was published in 1916. Classes were given during the following winter, but after April, 1919, the Red Cross concentrated on the enrollment of dietitians for service.

Soon it was decided that there was a need for a committee of dietitians to pass upon applicants. Miss Gunther was made chairman of this committee. The appointment cards, however, were issued from the national office of the Red Cross. Two types of dietitians were needed, one for base hospitals, and the other for instructors in Home Dietetics.

Twenty-five hundred dietitians were enrolled, of whom 250 were used in hospitals of this country and 97 with the American Expeditionary Forces. That they were appreciated is shown by the fact that three were decorated by the British government, and two were lent on request of the United States Public Health Service. The Red Cross also rendered valuable service to dietitians.

Peace brings a broader vision and changed field of endeavor. The Red Cross feels that every woman in the country should know something of the science of nutrition. A flexible outline has been planned which the teacher may use to meet the needs of the women of factories and department stores, for instance.

Emphatically, the Red Cross wishes to cooperate with, supplement, and help other organizations or agencies to cooperate with extension workers through the stimulation of an interest in the Federal and state activities by bringing intelligent pressure to bear on Congress, so that Congress will make the necessary appropriations.

Each hotel accommodates 162 women, and there are only 20 double rooms in each house. The rooms are simply but artistically furnished with bed, two chairs, bureau, desk and a cedar utility box. There are in each hotel five large social rooms for dancing, cards, and receptions, as nice as those in any hotel. The only badge of admittance is that the women must be workers for the United States Government. The rules of the house are simple, and, aside from rules for protection and safety, the one most important rule is that at eleven o'clock the house closes to outside guests. The problem here is just as hard as in any college dormitory, for it is always hard to say "good bye." They have adopted a new plan for the protection of their guests—namely, that of having twelve watchwomen in the houses. Major Pullman has been a great help and has cooperated with Miss Davis, as has also the Woman's Division of the Police under Mrs. Van Winkle. The idea is a good one, and the plan works very well, as, besides guarding the house against burglars and fire, these women can help in case of illness, can call doctor or nurse, and are a strong contributing force to the happiness of the women.

The government of the hotel is now in the hands of the women and the administration is proving very satisfactory. In the beginning, they had five administrations of hotel men who either got tired, found the work too hard, or decided it was really work meant for women. Hotels are combination of hotel, boarding-house, and dormitory for the use of women who want independent life, society, and protection. The grounds occupy altogether two acres, and are often referred to as "No Man's Land," no one on the staff being married.

One of the problems is the proximity to the Capitol, for some of these women workers take their problems to Congress, and these are often matters which could be settled by the staff. The guests pay $20 a month for their rooms and $25 a month for their meals, and the dining-rooms serve 2,200 people daily.

The hotels are here to stay, and are solving the problem of how to take care of our thousands of governmental workers. They have now about 1,400 applicants on the waiting list, and 14 rooms will be vacant this fall. The question is often asked how the personnel of these hotels differs from the ordinary hotels. The only difference is that the complaints mean more. The government needs women, and the women need houses. These women can inquire into things and the hotel must give satisfactory service as cheaply and as nicely as possible.

Miss Cooper, in speaking of Miss Davis' paper, said she for one could appreciate the great improvement in the conditions at Washington.

The next paper was read by Miss Mary A. Lindsley, the dietitian of the Government Hotel at Washington. She said that, although the two administration buildings were erected as an emergency measure and the equipment put in for temporary use, the arrangement is very satisfactory and the equipment conveniently placed. The two dining-rooms take care of 1,080 women each, 540 at each sitting. The dining rooms are spacious, with an east and west exposure, ventilation being gained through a central cupola, and sliding windows on the sides. Electric fans serve as an aid to keep the guests as cool as is possible in Washington. The tables are colonial, of fumed oak, seating six. The chairs are the same style, with rough seats. The linen is of unbleached muslin, and there is a plentiful supply, so that, if necessary, the tables may be changed between sittings. The water is cooled by the refrigerating plant, with a plentiful supply of nickel faucets. White china and silver is used, marked with the Government stamp The dining-room force consists of forty-five or forty-six waitresses, having four captains, six bus-girls, and a head waitress. Each waitress takes care of two tables, and the guests are quickly and efficiently served. The linen is taken care of in their own plant, and is very inexpensively laundered. Waitresses are provided with a white apron uniform, fresh for each dinner. The kitchens are directly back of the dining-room, and have an east, south, and west exposure, with plenty of light and also a dome ventilation. The equipment is arranged in units, so that each apartment can be easily controlled.

From the pantry on the left of the exit from the dining-room are served cereals, hot and cold, bread and butter, fruits and desserts (except ice-cream and cake), and all drinks except iced tea. Here they have six women, a coffee man, a porter, and a director in charge. About nine hundred salads are fixed before dinner time, and, as there is a good refrigeration plant, they can be stacked and kept cold.

The equipment is regulation, with a roll warmer, to keep rolls very hot. Back of the pantry is the butcher shop, with the refrigerating plant at the right. Meat is weighed as it comes in, and again after it goes to the chef, in this way checking the waste. In the kitchen are six double hotel stoves, two broilers, aluminum stock pots and vegetable cookers, which are covered by one hood, and there is no trouble with atmosphere and steam. The dish-washing is done at the right in a section by itself, with a machine at the farthest end. The silver, glass, and cup sinks are all conveniently arranged, so that the bus-girls can get rid of their dishes easily and quickly. There is a head dish washer, a head pantry man, head butcher, and a chef—each one responsible for the work in his department. In this way, all the departments are under control. The bakery and pastry rooms are centralized in the recreation building because of storage facilities. They bake 350 loaves of bread each day; serve rolls in the morning and dinner rolls at night; and when they make pies, they make 275.

When the buildings were first erected, there was no provision made for the accommodation of the employees; but the building has since been reconstructed so that there are now lockers and dressing-rooms for both men and women. In a closed court at the back is a vegetable room and a store-room, and over these have been built dressing-rooms, with windows on two sides, good ventilation shower baths, and other conveniences. They are trying the standardization scale for wages, with a minimum, maximum, a scale for rise and a bonus. In this way, they hope to have a continuance of labor and have all the work done as efficiently as possible. For instance, the head store-room man has advanced to a receiving clerk, which is a very important position. When the goods are ordered, a duplicate slip is made out, and the duplicate given to the receiving clerk. Goods are checked as they come in, slip sent to the department, and checked there. In this way, standards of goods received may be checked up.

Guests are served with two meals a day, two meals on Sunday, and the food is of a quality which will keep them in the best physical condition. They are served fresh fruit every morning, and in the summer hot and cold cereal, with 10 to 14 per cent cream. Eggs are served every morning, and sometimes bacon or ham, or other meats; hot bread, coffee, cocoa, and milk are served as drinks. This meal is put up at a cost of 40 cents to non-resident guests. Dinner (which is served at a cost of 60 cents) consists of soup, choice meats, potato, vegetable, salad, dessert, and choice of drinks. There is no limit to the amount served. The foods are well pre-

A group of some of the members of the American Dietetic Association at Second Annual Convention, Cincinnati, September 9-12, 1919.

pared and as well seasoned as is possible in large quantity cookers. The guests are very gracious and kind in their suggestions and criticisms.

One kitchen is under the administration of a woman, the other a steward, and neither has proved entirely successful. The board has decided that the only way to get the best service is through trained women, and they are therefore offering two openings to trained dietitians, one to have charge of a dining-room and kitchens, with entire charge of the food to assist in menus, and assist in checking up supplies; the second, as a student dietitian to work in the administration of the pantry. This will require no menial work, as they have well-paid and experienced help, and will give a student an excellent experience in receiving and getting out supplies, checking orders, administration of pantry, and relieving in the kitchen.

The next paper, on the subject of hospital cafeterias, was read by Miss Eleanor Wells, of Teacher's College. This paper will appear in a later issue of THE MODERN HOSPITAL.

The discussion on Miss Wells' paper opened by Mrs. O'Dea, of Johns Hopkins Hospital, where the cafeteria system for nurses has just been opened. They have had this method for employees and for their colored people and have found it satisfactory throughout. Miss Howington, of the City Hospital, Louisville, Ky., says they have cafeteria service there for their interns, nurses, and office force, and they like it very much. Mrs. Crossland, of St. Marks' Hospital, Salt Lake City, said that they had to install it because they had no help, and that they liked the system. The nurses not only have to return their dishes to the serving room but they also have to scrape them themselves. She finds they get the food much hotter, with little or no waste. Miss Oliver, from the Blodgett Hospital, Grand Rapids, Mich., said they served eighty-five to ninety nurses, and thirty special nurses in this way, that they have reduced their waste, and the nurses want to have the cafeteria continued. They have no new equipment. Miss Brinton, Lakeside Hospital, Cleveland, says that they have their nurses return their trays to the kitchen. In this way the tables are kept clean and ready for the next time. Miss Helen Wells, of the Woman's Hospital, New York, says they also carry their dishes out, and like this system better.

In the absence of Miss Geary, of the National Y.W.C.A., who was not able to be present, Miss Arnold, of the Y.W.C.A. Board, read a paper on cafeteria management. She says that there is a natural prejudice against cafeteria, and she contends that the difference does not lie between the two forms of service, but rather between good and bad cafeterial systems. She says there are three essential factors in good cafeterial management, the first of which is the quantitative. Almost all efficient management comes within this range. The cafeteria should serve quickly and cheaply, and we should recognize the ratio between the buying and the selling price of food. We have to have a menu price standard which is made by adding the prices of the different foods and dividing by the number of foods served. In this way we have a basis for comparison. The cost of the food should be between 50 and 60 per cent of the selling price, depending upon the standard we are trying to get. There are two tests for a quantitative factor: First, lack of waste in the kitchen; and second, the exactness and accuracy of storeroom records. We should also have exact knowledge of what every food costs, and of the food value of every item we serve.

The second factor is the qualitative, shown in the quality of the food and the quality of service. The standard of our food must be very high, and we should have a more sensitive taste than the most sensitive of our customers. The organization of the menus is an important point, for we must not serve all one kind of dishes on one day. We must avoid a repetition of the dishes several days in succession, and we must not have the same thing on the same days of the week. In cafeteria management, we have a

chance for dietetic propaganda, for we can give different varieties of balanced meals and at the same time give the public what it wants The quality of service is an important factor, and we need employees who are not only alert, quick, efficient, but human as well.

The third important factor is the demand for the food. We have to take into consideration the differences in type of individual. Men want different things from women, boys from men, and women from both, and we have to plan our food to meet the demands of each and every one. In order to do this, we must have a type of woman who can give the best service; and for this we are looking to our trained dietitians.

In closing, Miss Cooper asked that those who were reading papers give copies or abstracts of the same to her as soon as possible. Miss Graves asked that each one consider business matters which they wished brought up for the consideration of the committees on curricula, nomenclature, and standardization. Miss Perry was not able to serve on the Committee on Standardization, and Miss Eckman was appointed in her place. Miss Graves also asked the members to think about the future meeting place, and be ready to offer suggestions.

Friday, September 12, Morning

After an admonition by Dr. Warner to all to buy tickets promptly for the adjournment dinner of American Hospital Association, Miss Graves introduced Miss Bertha Wood, of the Boston Dispensary, Boston, who read a paper on the subject, "The Dietitian in a Hospital Dispensary." Miss Wood's paper will be published in a later issue of THE MODERN HOSPITAL.

In the discussion, which followed this paper, Miss Wood replied to the query, "Can all the people who visit the dispensary afford to buy milk and eggs?" That is just where the social service worker comes in. After an investigation, if the patient is really needy, there is an arrangement made with some other agency to furnish the food as needed. Dr. Young called attention to the cooking classes which Mrs. Lincoln gave the Harvard medical students when he himself was there.

To the questions, "What are the hours of the clinic each day? How many patients daily?" Miss Wood said that the clinic was open from 9 a. m. until the work was completed—usually 1 p. m. The average attendance is from ten to twelve.

JOINT GENERAL SESSION

Lieutenant Irons, who presented himself as just a doctor, not a dietitian nor a hospital superintendent, said he had long been impressed with the excessive waste of food in hospitals, hotels, and households.

To avoid waste, he said, first, make a study of what your people are thinking; second, use common sense; and third, bring about cooperation between patients and your organization, and cooperation in the various parts of your organization. Dr. Irons made it very clear that he was out of sympathy with the movement to criticize the army officers. When we consider the difficulties under which they work, we realize that they deserve great credit.

During the war, the propaganda for saving food accomplished a good deal, but now wastes are creeping up again. Two years seem too short a time in which to break a national bad habit. Even before the war Mr. Pitcher had made a report calling attention to the large wastes in hospitals, but it seems not to have had a great effect.

"A hospital manager would welcome a hundred thousand dollar endowment, but if he would look into matters he would probably find that every year there was thrown out the back door in the garbage can food costing as much as the revenue from this hundred thousand. The waste should not go on. Even if the country is rich, there are many people who do not have enough to eat, and every pound which you waste puts this possibility farther away from them. We must also consider the increasing increment of labor. It is worse to waste a pound of bread than a pound of floor wheat.

If the hospital superintendent were to survey the garbage cans, he would find in them substance which, though it is now garbage and is to be sold for the feeding of hogs, only a few days before cost from ten to twenty times as much as he will now get for it. The superintendent makes the feeding of hogs an excuse for this waste. If the superintendent went into the different departments where food is served, he would find that different departments consume different amounts. Next, if the superintendent should visit the wards and talk with the patients, he would find a difference. For instance, he would learn from John Smith, who has a broken leg, that he is losing appetite; that he is getting too much food; that food which he dislikes is being served to him; and that his food comes to him cold. For all of these reasons, there is a waste from John Smith's tray. Next let the superintendent step into another ward, and talk to John Jones. On this ward, there is a head nurse who knows what John Jones likes, and who takes an individual interest in her patients. She has corrected the defects found in the other ward; so there is little waste.

Now, nobody deliberately wastes things, but someone must provide an assistant for savings. Let us compare the army hospital with the civil hospital. You say an army hospital has discipline. The essence of discipline is prompt, willing compliance with orders, and cooperation with the men.

In a survey made in 1918 of 437 messes, the waste was found to be .9 pound per person per day. Of this .38 was derived from food which could have been used. Next, the refuse was classified as follows: first, edible food (for hogs); second, non-edible food; third, bones and fats, which could be tried out to make grease; and fourthly, tin cans; fifth, sweepings. At Camp Custer, the commanding officer had excellent cooperation from the staff. There was a propaganda for savings. There was a separation and report of garbage daily. Each ward brought its garbage to a central garbage station, where the garbage was separated and weighed. A report of these weighings was sent daily to the commanding officer, the mess sergeant, the dietitian, the superintendent of nurses, and to every ward. A competitive interest resulted. July 28 the waste was 1.85 ounces per person. August reduced it to 1.25 ounces per person. September 7, it was .31 ounces, and September 28 it was .15 ounces. During September and October, there was an average saving of 1.5 ounces of food per person, or 12,000 pounds of edible food. From this saving better food could be purchased.

To accomplish this saving the food must be separated and a good, clean place to collect garbage provided.

In a civil hospital, out of 1,000 pounds of garbage, but 303 pounds came from the kitchens; the remainder came from the wards. The separation of the garbage showed that from 60 to 70 per cent was originally edible. After an attempt the situation was improved in the wards, but from the private rooms there was little response.

The dietitian is often allowed to purchase food for special diets only, when she should be a general buyer, for she knows more about food than any one else in the hospital. She should have some time to spend seeing what becomes of the food in the wards. There is an abuse of

the special diets, which are sometimes ordered when there is no clear-cut medical reason for ordering them. Sometimes they are ordered simply because the ward diet is so poor. The diet kitchen should not be used for this purpose. Instead, the dietitian should be allowed in the general kitchen.

In the discussion which followed Dr. Iron's paper, Mr. Fess reported that 27 years ago his hospital appointed a dietitian. They could not afford to keep her because she could not conserve food. "What is the trouble?" he asked. It has been that, when scientific medicine came in, human medicine went out. The same may apply to dietitians; when scientific dietetics came in, Aunt Susie's dietetics left. The dietitian should have complete charge of the culinary department, but she is apt to run up the cost. She must learn to be an executive and learn to control employees.

Dr. Bacon believed Dr. Irons very thoroughly discussed the question at hand and said that when he returned to Chicago he meant to visit some of the Chinese restaurants to obtain suggestions about conservation.

Miss Graves, in introducing Prof. J. R. Murlin, of the University of Rochester, formerly Chief of Food and Nutrition Division, Medical Department, United States Army, reminded the dietitians that they had had a friend in the Army, for it was through him that the first regulation for dietitians was brought about. Professor Murlin then showed us a moving picture film, "Food Supervising for the Army," which showed the receiving and inspecting of meats, both fresh and canned, the methods of serving in cantonments, and a section of the cooks' and bakers' school.

In closing, Dr. Murlin said that this was the first war in which dietitians had been used, but that the dietitian has made good in the Army. He still regrets that her status was not entirely satisfactory.

Friday, September 12, Afternoon

Business Meeting

This session was opened by a paper on "Child Feeding," read by Mary Swartz Rose, of Teachers College, Columbia University, which will appear in a later issue of The Modern Hospital.

Miss Graves announced that at some future time, copies of the proceedings of the meeting would be printed, that these would cost something between thirty-five cents and one dollar, and that those desiring copies should leave their names with the secretary.

In the discussion of the affiliation of other city and state dietetic organizations with the American Dietetic Association the following expressions of opinions were obtained:

Miss Drew: The Minnesota State Dietetic Association is anxious to affiliate with the American Dietetic Association. It has a constitution and by-laws, and its membership conforms to our requirements.

Miss Smith, Chicago: The Chicago Association would be glad to make its membership conform.

Mrs. Mehlig: Any good dietitian should be able to conform.

Miss Graves: Many women are doing good work now without having had the preliminary training. Our requirements would bar out certain members of the city and state associations. These associations need all the help they can have. We must work closer together.

In giving the report of the Committee on the Work of the Standardization of the Dietitian, Miss Eckman, the chairman, said: "To the end that a dietitian may be properly trained for her duties, it is a necessary proceeding that those duties be standardized. It is therefore recommended by this committee that, first, she be responsible to the superintendent of the institution or corporation in which she is employed, or to his accredited representative alone; second, that she be responsible for the entire culinary department and food laboratories in that institution; third, that she have authority over the purchase of all culinary supplies, either to buy the same directly, or to approve the purchase of these commodities, bought by her recommendation; fourth, that she have charge of her own employees and her own pay-roll; fifth, if the institution is a hospital containing a training-school for nurses, that she be responsible for the course of study and the instruction of the nurses in dietetics; and sixth, that she cooperate and consult with physicians in providing general and specific diets for the patients of the institution.

"It goes without saying that only a highly-trained and experienced woman can fill the position of dietitian. It also goes without saying that, if a position is a large one, she should have trained and competent assistants. This last being the case, young women fresh from training schools may serve apprenticeship in her various departments and obtain further training and experience in field work that will fit them to become assistants, and later on, to fill the larger position of dietitian."

It was moved that the Committee on Resolutions be instructed to send a vote of thanks to all those who contributed to the success of this meeting, to Dr. Holmes, Mayor Galvin, the trustees of the Cincinnati General Hospital and Medical School, to Miss Hyde, to the local committee, to the American Hospital Association, to The Modern Hospital, to Hospital Management, and to our exhibitors.

The following nominations were made by the Committee on Nomination: President, Miss Lulu Graves, Home Economics Department, Cornell University, Ithaca, N. Y.; first vice-president, Miss Ruth Wheeler, Home Economics Department, Gaucher College, Baltimore; second vice-president, Miss Margaret Deaver, Mount Sinai Hospital, Cleveland; secretary, Miss E. M. Geraghty, New Haven Hospital, New Haven, Conn.; and treasurer, Miss Margaret Sawyer, supervising dietitian, American Red Cross, Washington, D. C.

The report of the committee was accepted by a rising vote, and the meeting adjourned.

The Delivery Room—A Hint from the Jungle

The cheerful, light, airy delivery room is characterized by Dr. P. A. Kane, writing in the *New York Medical Journal*, as an offense against the newborn. A child should be born, he says, in a room with a high temperature, to preserve the tender body and lungs from injury through chilling, and in a dark room to protect the eyes from injury through excess of light. It should be born in a room painted green with green shades on the windows, and those kept pulled down. The room should have only one door, with the windows kept closed, and if opened for ventilation, should have heavy screens in the openings to stop all possibility of a draft. The child should be kept in this room for months; no handling should be allowed except for cleanliness and feeding. If our eyes were developed under these circumstances there would not be such a promiscuous wearing of glasses as we see today. The welfare of the mother should be regarded as secondary to that of the child, in Dr. Kane's opinion.

A judicious silence is always better than truth spoken without charity.

PAPERS AND REPORTS PRESENTED AT CINCINNATI MEETING

Subjects Discussed Cover Reconstruction Problems in Hospital and Nursing Fields — Policy of Institutional Membership to Continue — Association Alive to Bigger Legislative Issues

THE TRAINING OF HOSPITAL ATTENDANTS

General Shortage of Nurses Raises Problem of More Adequate Nursing Care for Sick—School for Training of Attendants Opened in New York City—Effect of Movement on Regular Nursing Schools

By AGNES S. WARD, General Superintendent of Nurses of the Department of Public Charities, New York City

I believe we shall all agree that there is a crying need throughout the entire country for more adequate nursing care for the sick. This is not a new condition. It has been with us more or less acutely for years. Doubtless most of us are endeavoring to find some fairly satisfactory solution of this grave nursing problem—a solution that will give the desired care without doing injustice to the pupils and graduates of the schools of nursing. The problem is a complex one. It is generally conceded that the interest of the institution is best served by the highly skilled service rendered by the nurse—graduate and student. Unfortunately there are not enough nurses to meet the demand, and there is much routine work and simple nursing procedure that might fittingly be done by a less skilled group.

In considering a second group we believe it to be vital that only such plans be considered as will not interfere with the schools of nursing. We feel strongly that no one institution should maintain a school for nurses and a school for a second group. Not only would there almost inevitably be friction between the two groups, but the public would not understand the difference between the diploma granted to the nurse and the certificate granted to the attendant. Each would be a graduate of the same school. This would bring bitter feeling in the nurses' alumnae, which would eventually, we believe, be to the detriment of the institution.

Schools for the training of attendants could most fittingly be established in special institutions where there are not schools of nursing. After graduation these trained attendants could be employed as assistants to the nurses in the general hospitals. In their training these attendants would be taught to do well a certain class of work and could relieve the nurses of much of the routine labor. Such a course should be simple and largely practical. Doubtless the majority of the women who would be interested in taking such a course would be women with good, practical nursing sense but with not much ambition for class work, and little appreciation of the value of education.

Two such schools for attendants have recently been opened, and a third one will be opened in the near future in the Department of Public Charities of the City of New York, of which the Honorable Bird S. Coler is commissioner. These schools are all connected with special institutions and will in no way interfere with the schools of nursing in the department. The special institutions with which they are connected are the Neurological Hospital, the Hospital for Defective Children, and the Tuberculosis Hospital. The material is ample to give a good attendants training in each of the hospitals, and there are many such institutions all over the country where such a course could fittingly be given. The course is a simple, practical one. The applicant is required to be able to read and write well enough to take orders intelligently and to keep simple bedside records. The superintendent of the school decides as to the fitness of the applicant. The length of the course is nine months, with seventy (70) hours of theoretical work, as follows: elementary nursing, 25 hours; cooking and dietetics, 20 hours; hygiene, 10 hours; care of children and infants, 5 hours; care of chronics and convalescents, 5 hours; accidents and emergencies, 5 hours.

The superintendent of the school, with her assistants and the resident dietitian, give most of the instruction, only a few lectures at the end of the course being given by the visiting medical staff, who are urged not to talk over their heads. There is no work in Materia Medica. The pupils are taught the need for great care in the handling of drugs and are also taught how to give a hypodermic with sterile water. This we feel is much better than giving a superficial course in Materia Medica. The course is new and therefore, experimental. We feel, however, that, if experience indicates the advisability of a higher educational standard and a longer course, we shall be ready to make the change. The simple course seemed best for the present.

A post-graduate course of three months is offered. This may be taken in any one of the other institutions in the department maintaining a school for attendants. Later, if there seems to be a demand for such assistants in Public Health work, this branch of service may be included in the post-graduate course. A certificate of graduation is given on satisfactory completion of the nine-months' course, and an additional certificate is given for the post-graduate course. The schools are called training schools for attendants, and the graduates will be known as trained attendants. Classes are formed every three months. Only one text book, *Practical Home Nursing*, by Henderson, is used, which covers in a concise, simple way about all that it is possible to give in so short a period.

During the course the uniforms and books are provided, and an allowance of $25 a month is made. This may seem to some of you to be a too generous allowance. We must bear in mind, however, that the course is largely practical (only 70 hours of theoretical work), and that the pupils will be drawn principally from homes where their families cannot give them help. In fact, many of them will probably have to give help rather than receive it. Then, too, when we consider the present purchasing power of a dollar, perhaps we shall agree that the allowance is only fair. There are other points, also, to be considered. There are the alluring opportunities in the commercial world which these people can ill afford to forego. The attendant group, as a whole, is not ambitious for education and naturally does not appreciate it. Therefore we must make conditions sufficiently attractive to have them feel that it is worth while.

There is an excellent eighteen months' course for attendants at the Montefiore Home and Hospital for Chronic Diseases, New York City. Eighteen months seems to us unnecessarily long when there are schools where a nurse may receive her diploma and take her state board ex-

aminations at the completion of only a two-year course.

The Young Women's Christian Association gives an eleven-weeks' course for training attendants. This is a very good course for those wishing to do a little nursing in their own homes. Most of the time is spent in class work, hospital experience, nine hours a week, being optional. The course is too expensive for the woman of the average attendant group; as the tuition fee is $35.00, and the uniforms are about $6.00 each, besides maintenance. We can see that this course could hardly be counted on to meet any large need. There are other short courses in New York and in other parts of the country, but the supply is wholly inadequate. Very few of the special institutions are being utilized for giving such courses. Would it not go a long way towards solving our problem if a campaign were started to encourage all institutions where there is not proper material for training nurses to start schools for attendants?

Naturally we ask how such a movement would affect the schools of nursing and the graduate nurse. How many of this attendant group would later qualify to enter schools of nursing? We believe that very few will have ambition to study and qualify to enter schools of nursing. In the tuberculosis department of the Metropolitan Hospital, New York City, with which I have the privilege of being connected, the nursing for the past eighteen years has been done entirely by experienced attendants. During all these years not more than about half a dozen of the attendants have qualified and entered schools of nursing, and this may be taken as a fair example of what may be expected from the group.

A second and perhaps more important question is the probable number of those who will pose as graduate nurses. We confess that it is with fear and trembling we approach the question. Doubtless the proportion will be large. However, we all know that to-day the untrained attendant and the probationer who spent ten days or two weeks in some school pose as graduates and send undaunted to the grave many a typhoid or pneumonia patient. Would it not, therefore, be a protection to the graduate nurse to have a recognized attendant's course established? Such a group could doubtless be protected by legislation without requiring a written examination. It would seem that eventually such a trained group would diminish rather than increase the number of those who pose as trained nurses.

We would urge, then, that a campaign be started throughout the country to establish schools for attendants in special institutions, such attendants after graduation to be employed as assistants to the nurses in hospitals where schools of nursing are maintained. This we feel will materially relieve the present strain due to shortage of nurses and will do much toward giving the patient the desired nursing care.

Report of the Executive Secretary

In June, 1918, the services of the writer were loaned by the Cleveland Hospital Council to the American Hospital Association. He was requested to complete plans for the 1918 convention. It was to be a part-time effort only. The difficulties encountered, however, demanded full-time service. No work was done for the Cleveland Hospital Council by the executive secretary during that period. Perhaps the most that can be said about the results is that the Association got through the Atlantic City Convention without disaster.

At the request of the Association at Atlantic City, the writer became executive secretary on a part-time basis. It was generally understood that his time would be divided between the American Hospital Association and the Cleveland Hospital Council. In a measure, it was a war-time arrangement. While considered only as a part-time position, it has, in reality, carried full-time responsibility.

The war is now over. There seems to be no reason for a continuation of part-time service in the office of the executive secretary. The Cleveland Hospital Council now desires the full time of its executive officer, and we are assuming that this temporary arrangement will be concluded with, or shortly after, this convention. If it has proved of any value to the Association, we are glad; at least, we are grateful for the opportunity given us to be of service.

THE EXECUTIVE SECRETARY

Since the writer is not a candidate for any position with the Association, comments upon the position of the executive secretaryship should not be out of place. The Association is now twenty-one years of age. It has developed rapidly since the Philadelphia convention and has reached the point where it demands the full-time services of a big, broad-gauged man as executive secretary or business manager. The position requires initiative, industry, tact, and patience and all the qualities that go to make up a competent administrative officer. Any one willing to accept such a responsibility for $3,000 or $4,000 a year is not qualified. The position should pay at least from $7,000 to $10,000 the first year.

INSTITUTIONAL MEMBERSHIP

This policy has been discussed in the president's address. The reasons for its adoption at Atlantic City were fully discussed there and have been set forth from time to time during the year. The best reasons for continuation of this policy, as a basis for organization of hospital workers and hospital sentiment on a state and nation-wide scale, will appear in the report of the legislative committee. It is commended to your attention. During the next year at least three hundred additional institutional members should be added.

SERVICE BUREAUS

"The approval of the policy of establishing service bureaus in the Association as fast as finances will permit," is the answer to the merited inquiry, "What are hospitals goirg to get in return for their institutional membership?" One such service bureau has already been established; namely, that on dispensaries and the community relations of hospitals. The legislative committee will recommend the organization of a bureau on legislative service. My personal experience in the hospital field and in dealing with both state and national public health legislation prompts me to say that no more important step can be taken by this association at this time than the creation of such a bureau.

Modern hospitals are factors in public health work. As such, they are maintained by tax-collected funds or by private philanthropy. While they exist primarily to prevent disease and to take care of the sick, they have certain other important functions. They are expected to afford opportunity for scientific study and research, and to help educate and train both physicians and nurses. Along all of these lines they are expected to render satisfactory service to the public. Whether public or private, they are subject to certain rules and regulations and are bound by laws of supervision and control at the hands of the state. While they have certain obligations to meet, they have interests in common to protect. To meet these obligations and protect these interests, they have been slow to organize. In some states where there has been

an opportunity to secure state aid they have been well organized for this purpose. But it may be safely said that they have been lamentably weak in organizing to keep their superintendents and controlling officers informed through a central office of all legal matters, particularly legislation, national or state, affecting their financial interests and their public health responsibilities. This is a serious situation.

It can be met by the American Hospital Association by increasing its institutional membership; by encouraging the extension of this plan through affiliation with state and sectional associations; and by the establishment of a live legislative service bureau. If for no other reason, such an organization is needed to assist the hospitals in the protection of their own interests. The butchers, the bakers, and the candlestick-makers have active organizations to fight obnoxious legislation and to promote their own interests. Why not the hospitals?

OTHER SERVICE BUREAUS

There have been suggestions during the year that service bureaus on hospital accounting, on hospital construction, and on purchasing and standards be established. Obviously, all could not be created at once, but these are urged for consideration. Hospitals will be surprised at the results that can be obtained through a properly organized bureau on hospital standards and supplies.

The directors of service bureaus should extend and supplement the work of the executive secretary. They should be directly responsible to him and, of course, meet with him and the board of trustees when necessary if requested. If the position of executive secretary is made to correspond to that of a chief clerk, and the directors of the service bureaus are allowed to establish a direct relation to the board of trustees, becoming in a measure independent of the executive secretary, no end of trouble is bound to result. This Association cannot afford to develop its executive management along unbusinesslike lines.

If progress "rides the saddle" at this convention, as I believe it will, several of these bureaus should be approved and authorized for the coming year. While the income of the Association is increasing, more money will be needed for this purpose. If ten or fifteen thousand dollars be needed, I know there are ten or fifteen men interested in hospitals and public health who will be glad to give a thousand dollars for each of the next two years for service bureaus. The writer will be glad to assist in a plan to raise this money. The Association must advance and meet its responsibilities.

PERSONAL MEMBERSHIP

The personal membership plan has been continued. At the present time there are 214 active and 65 associate members whose dues are paid up to date. There are a number of delinquents, all of whom, except those delinquent for more than two or three years, have been notified of their delinquency. Of course, it is to be expected that with the adoption of the institutional membership plan the number of personal memberships will decline, and it will take some time to readjust the two classes of membership.

BUSINESS MANAGEMENT

During the year it has been necessary to transfer the books and records of the Association from Washington to Cleveland. The bank account was transferred to a Cleveland bank. Sound business sense necessitated such action. Obviously, the executive secretary could not be held responsible for the management of the affairs of the Association with the records, books, and accounts in a city several hundred miles distant.

The institutional membership records, commercial exhibit books, and financial accounts of the Association will be found in good condition. Personal membership cards are not in just the condition we would like to have them, but perhaps the best considering the fact that they did not come into our immediate possession until July of this year. The books of the Association were audited by expert accountants on January 1 for the year 1918, and again on September 1 for the first eight months of this year. These audits will be presented to you by the auditing committee.

The Washington office is still open and in charge of a clerk who is paid a small compensation. It would seem the logical time for the Association to determine now where its official headquarters will be located for the future. The Association should have offices and office arrangements that will attract confidence in those who visit them. The adoption at this convention of a permanent office policy is recommended.

At the end of the 1918 convention the Association had a balance in the bank of about $3,000. The balance on September 1, when the audit for the first eight months was completed, was $5,393.04. This does not take into consideration accounts payable, including commercial exhibit and some institutional memberships. The Association should close this convention with a balance in the bank of $6,000.

The commercial exhibit, which is the largest on record, speaks for itself. There is no reason why we should not have a $15,000 exhibit next year.

EMPLOYMENT BUREAU

The operation of an employment service by the Association is not an unmixed blessing. It has been carried on this year through a bulletin system and has not proved entirely satisfactory. It is understood that THE MODERN HOSPITAL is about to conduct a hospital employment bureau. It is possible the Association can work out a cooperative arrangement with that organization. This development should be given consideration.

PUBLICATION OF PROCEEDINGS

The 1918 proceedings were not published and distributed until late in the year. The executive secretary suggested early in the year that no special volume be published, but that a cooperative arrangement be worked out with THE MODERN HOSPITAL whereby the numbers of that journal containing the proceedings, important papers, and discussions at the convention might be furnished to members of the Association. There were many, however, who preferred to have the special volume and, accordingly, arrangements were made with THE MODERN HOSPITAL to publish it. THE MODERN HOSPITAL cooperated by keeping its type standing, giving the Association this advantage. The proceedings were published and distributed at a cost of about $1 a volume. This is a very reasonable figure. If the Association had not received the benefit of the standing type in the hands of THE MODERN HOSPITAL, the increased cost of labor and materials would have greatly increased the cost of publishing the proceedings.

This year an agreement has been made with the convention reporter to take all of the proceedings, write them up, send them to the participants for correction, and return the same with complete corrected copy for publication, if possible, within sixty days after the convention. The Association will then be in a position to print a

special volume if it desires. It would seem, however, that a cooperative arrangement might well be worked out with THE MODERN HOSPITAL thereby making it unnecessary to print a special volume. It is worthy of consideration.

The thanks of this Association are due THE MODERN HOSPITAL for its fine cooperation in publishing the proceedings at a very low cost and for the large amount of publicity given this Association through its columns in the past year. In this respect the Association has been a fortunate beneficiary.

And so with every good wish for the future development of this Association, this report is

Respectfully submitted,

HOWELL WRIGHT,
Executive Secretary.

Report of the Legislative Committee

This is a report of the legislative committee of the American Hospital Association. It is intended to give a brief account of the activities of the committee during the past year. It seeks to emphasize the importance of the relations between Federal and state governments and the hospitals, as well as the necessity for organized effort on the part of the hospitals to strengthen and further improve these relations. For the protection of the public health and the financial and other interests of the hospitals it demands organized legislative action.

The constitution provides that:

"The legislative committee shall, so far as possible, inform itself concerning all legislative procedure affecting the Association or the interests which it represents. Subject to the approval of the Association, or Board of Trustees, it shall actively support all desirable legislation, and actively oppose all unwise legislation."

The committee has interpreted this to mean that, first, it should inform the hospitals and interests involved, as well as itself; and, second, that any activity taken for or against legislation should be before it is enacted, and not afterward. So far as possible, then, within the limits of its present organization, the committee has proceeded accordingly.

PUBLIC HEALTH RECOMMENDATIONS IN THE GOVERNORS' MESSAGES TO THE LEGISLATURES

Early in the year, the committee made a study of the messages of the governors to the state legislatures and a digest of the public health recommendations of general and special interest to hospitals contained in each message. The committee was prompted to do this because it believes that the governor's message is of great importance, in that it frequently reveals the public state of mind about questions of the day. The average governor has his ears to the ground to learn what his constituents think and say about public questions. The 1919 messages indicate clearly that the great war, as well as the influenza epidemic, prompted both people and governors to take a greater interest in public health.

The committee sent a special bulletin to the hospitals in many states calling their attention to the recommendations made by their governors. It urged them to take an active interest in the measures proposed, and not wait until after the horse had been stolen to complain about the short-comings of the legislature. It is known that in a number of instances these bulletins were helpful to the hospitals. When the hospitals have become better organized, both on a national and a state-wide basis, a bulletin system of this kind may be made most effective.

The point that this committee wishes to drive home to this group of hospital workers and delegates is this: The hospitals of the states should be so strongly and effectively organized that, first, the political parties in convention will eagerly grasp their suggestions for the health and welfare planks of their platforms; and, second, that the governors will be glad to include the public health recommendations made by hospitals in their legislative messages.

It is the duty of this Association to assist the hospitals in creating just such state organizations.

PUBLIC HEALTH LEGISLATION ENACTED BY THE 1919 STATE LEGISLATURES

The committee has sought to inform itself concerning important health legislation enacted by the 1919 state legislatures. It has corresponded with officials in all of the states, and has compiled a large amount of data from twenty-five states. Additional data is on hand for this purpose. It is impossible to report in detail on the measures enacted. A great majority of them involved hospitals directly or indirectly.

A number of state health departments were organized, while in other states the work of both the state and local health departments was extended. There was a noticeable increase in legislative appropriations for general health work and sickness prevention. Of particular interest are the 1919 public health acts of New Mexico, Michigan, Ohio, Missouri, Nebraska, and New York. Quite a number of measures, involving workmen's compensation, nurse registration and public health nursing, were introduced. There were a number of important additions to the workmen's compensation acts, and a number of spirited contests over legislative proposals pertaining to nurse registration. Alabama and Missouri enacted new workmen's compensation laws, but the Missouri Act was deferred to a general election by petition. The contests over the Illinois nurse registration act emphasizes the need of expressing the organized hospital point of view when such legislative proposals are under consideration.

Federal Legislation

FEDERAL INHERITANCE TAX LAW

Last year and this, the Association, through its legislative committee, took an active interest in the Federal inheritance tax law in regard to charitable bequests. Both before and after the 1919 convention, at which a resolution on the subject was adopted, the committee joined with other organizations in urging that bequests to charitable institutions should not be subject to the tax on inheritance. A great deal was done to bring the hospital point of view before the members of the Senate and the House.

When the revenue act was finally approved, February 24, 1919, its provisions on this point had been modified substantially in accordance with the contentions of the Association. The committee suggests that hospitals secure a copy of this Act, Public Document, No. 254, Sixty-fifth Congress, H. R. 12863, for the benefit of their attorneys, calling their attention to Title 4.

THE ACT FOR THE PROMOTION OF VOCATIONAL REHABILITATION FOR PERSONS DISABLED IN INDUSTRIES OR OTHERWISE AND THEIR RETURN TO CIVIL EMPLOYMENT

This measure (Senate Bill No. 18), which has been only recently passed by Congress, is important. It provides for the vocational rehabilitation of persons disabled in industries. The Federal Vocational Board is authorized to cooperate in the administration of the Act with public and private messages. This includes hospitals. The provisions of the Act have to be accepted by the legislatures of the states, if the states desire to participate, or by the governors of the states, if the legislatures are not in

session. An obligation rests upon the hospitals to urge that such action be taken by their legislatures or by their governors. Large appropriations have been made by Congress for the work authorized in this law.

NATIONAL AND WAR-TIME PROHIBITION

When war-time prohibition became fully effective June 30, 1919, the United States Internal Revenue Department issued regulations which contained no provisions allowing hospitals to purchase or dispense alcoholic liquors for medicinal purposes. While there is a difference of opinion in professional circles as to the need of alcoholic liquors in hospitals, incidental to the professional treatment of the sick, the legislative committee decided to confer with the revenue department on the subject. Two questions were asked: (1) whether hospitals might purchase alcoholic liquors and dispense them to their patients in the course of treatment; and (2) whether such alcoholic liquors could be obtained tax free, as alcohol is now secured for scientific purposes.

Under date of August 18, the department issued a ruling, authorizing the purchase and dispensing of such liquors under strict rules and regulations, but not allowing tax exemption. A copy of this ruling has been sent to every institutional member of this Association.

FEDERAL DRY ENFORCEMENT BILLS

Congress is more or less engaged in the process of enacting enforcement laws for national and war-time prohibition. Contrary to the general impression, hospitals and the medical profession are vitally concerned in these measures. They are so concerned regardless of their opinions on the merits of prohibition. The measures under consideration are for the enforcement of prohibition.

Hospitals and the medical profession do not need to be reminded of how much they are affected under some of the provisions of the Harrison Narcotic Law. Red-tape rules and regulations often seem to be fitting partners, or the result of congressional political oratory. If hospitals are to be permitted to dispense distilled spirits and wine for medicinal purposes under national prohibition, iniquitous regulations, similar to those of the Harrison Act, may well be anticipated. But, the hospitals are more concerned from another angle—namely, patent medicines.

PATENT MEDICINES

What have patent medicines to do with dry enforcement bills and hospitals?

In the May number of *Modern Medicine*, Dr. S. S. Goldwater has an article on "The Care of the Sick in the United States in 1919." He outlines the need of a medical program, and points out that the United States is a great nation suffering, among other things, from patent medicines. There are $900,000,000 invested in patent medicines in the United States. With the adoption of the national prohibition enforcement laws, it looked for a time as if the patent medicine industry, which hospital people in general contend has been a great menace to public health, might be driven out of existence, and some of the sufferings of the nation eliminated thereby. This much desired result may not come to pass. In one state at least, which has adopted state prohibition, the dry enforcement bill was written in the special interests of the patent medicine manufacturers to the detriment of public health. A repetition is possible in Congress; at least, it is possible that the national dry enforcement act may be so modified as to permit the patent medicine industry to continue, when, as all hospital people know, it should be killed, not injured. Are the seven thousand hospitals in the United States going to sit back and do nothing about it, or, will those represented at this convention give some instructions to their legislative committee? A communication direct from the convention to the Senate committee on this subject is suggested.

When the next state legislatures meet, however, to write new dry-enforcement laws, let the hospital and health workers beware. Many times will your help be needed in deciding legislative contests—patent medicines vs. public health.

A NATIONAL DEPARTMENT OF HEALTH

There is now pending in Congress a bill (S. B. 2507) to establish an executive department to be known as the Department of Public Health, which, if created, would function in cooperation with the several states as a protector and promoter of the health of the people of the United States. It is known from reliable sources that favorable action is not likely at this session. While it is not necessary for the Association to be drawn into any controversy between the private organizations or committees who are promoting it, the legislative committee believes that this convention cannot fail to give consideration to this important national legislative proposal.

HOSPITAL AND WORKMEN'S COMPENSATION

The 1918 legislative committee's report urged hospital workers and associations to assume something more than a policy of indifference toward the subject of hospital benefits under Federal and state workmen's compensation laws. It was urged in that report that the common legislative and administrative limitations on compensation for hospital service result in injustice to both injured workmen and to hospitals. The principles expressed in that report are again commended to the attention of this Association. The principle of "hospital cost for service rendered," which has had the general approval of this Association, is an absolute essential in workmen's compensation laws for the injured workman and for the hospital which cares for him. If such laws limit rates of payment, as well as the number of days of hospital treatment, the result is loss of opportunity for the complete restoration of the workman seriously injured in industry. It also often places the hospital in the position of a choice between doing "charity work" for the state and the private insurance company, or of discharging the patient too soon. These are what Dr. Royal Meeker, United States Commissioner of Labor, calls "leaks in workmen's compensation." His address on this subject, at the annual meeting of the American Association for Labor Legislation in 1918, should be examined by hospital workers and associations.

The following facts should stimulate the organized hospitals toward securing legislation for necessary changes in workmen's compensation laws:

1. The principle of "hospital cost for service rendered" does not seem to have been included in other state or Federal workmen's compensation law.
2. Provision for adequate hospital treatment for injured workers is far more important than allowance of money benefits; yet four states make no provision for such services.
3. Twelve states limit the cost to one hundred dollars or less; sixteen limit the period to thirty days or less.
4. Only four states permit of adequate medical and surgical treatment by placing no limits in their laws upon the time or cost of such services.
5. Attempts are now being made to include occupational diseases within the provisions of workmen's compensation laws.

HOSPITALS AND HEALTH INSURANCE

The 1918 convention adopted a resolution on health insurance. Copies of this were forwarded to several state

health insurance commissions studying the subject at that time. They were urged to give full consideration in their recommendations to the principles of complete rehabilitation of the sick and that of "hospital cost for service rendered." The committee offered the assistance of the Association in the drafting of legislative proposals on this subject.

Three legislative proposals at least, seeking to provide a system of health insurance, were introduced this year—Ohio, New York, and Minnesota. In several states recommendations were made for the appointment of health insurance commissions to investigate the subject.

The Minnesota bill, which we have not seen, was killed in committee; the New York bill passed on to the House, and the Ohio bill is still peacefully sleeping in committee. None of these bills gave recognition to the cost principle for hospital service to the sick, although the commission which drafted the Ohio bill was supposed to have favored it. Advocates, in their enthusiasm for health insurance, seem to forget that hospital service for the sick costs money. They must be made to see. It may be necessary for the hospitals to write the hospital tariffs of health insurance, and to rewrite those in our workmen's compensation laws. Why not? Other industries have written tariff schedules.

Let the hospitals of this country make no mistake. Health insurance is coming even more rapidly than workmen's compensation came. The United States Public Health Service has just reported on the subject. It is being promoted and pushed by private organizations. Hospital indifference now will bring the same results it brought in workmen's compensation. It is the function of the American Hospital Association to wake up the hospitals to the dangers of indifference. The medical profession is rapidly awakening. The editor of one medical journal in a warning to that profession, says: "Capital, labor, and the medical profession are the three vital factors under any form of state insurance."

Think of this statement in the light of what an essential factor hospitals are in the care of the sick. But, unless they are aroused, and at an early date, the health insurance promoters, with the aid of the state legislatures, will leave them at the starting post.

RELATIONS OF HOSPITALS TO STATE DEPARTMENTS

All hospitals, whether public or private, have certain relations to departments of state. They are sometimes subject to certain rules and regulations made by state departments, and often bound by laws of supervision or control at the hands of the state. The laws, rules and regulations governing such relations are not alike in any two states. It may very properly be said of the plan of supervision and control of hospitals by state governments: "Mediocre, what there is of it, and, a lot of it, such as it is."

During the year the committee has sought to become informed, so far as possible, of the exact relations between hospitals and the state governments. Much data has been gathered, and some analyses made of it. It warrants the conclusion that there is work to be done in this direction by the organized hospitals. They must take up these matters in each state, and straighten them out. The association can help to pave the way.

What is a hospital? The inevitable question may well be asked: "Who knows?"

There have been attempts by legislatures and the courts to define hospitals and sanataria, but such judicial and legislative decisions are often found unsatisfactory. A few state departments seem to have been granted authority to define hospitals. Classification of hospitals has been authorized in some states for purposes of nurse training; in other states, the boards of charity make a limited classification of hospitals for different purposes. The distinction between "public" and "private" hospitals is not clearly understood in a great majority of the states. Clear, effective, legal definitions and classifications of public and private hospitals and dispensaries should be secured in every state.

The incorporation of charitable hospitals and hospitals for profit by the state raises important questions. In some states, this function is exercised by the secretary of state, in others, by a state board, while, in one or two others, articles of incorporation are granted by the legislature. Taken as a whole, there is very little investigation of these applications. Attempts to pass legislation, requiring extended investigation of these applications, have on numerous occasions been defeated by those who should have been subjects of investigation. It is a nation-wide problem.

The leading hospital workers of this country know that it is to the best interests of public health to have a reasonable state supervision over the "charity franchise." Many are fully aware of the evils resulting from promiscuous granting of hospital charters. As a protection to the public, hospitals should assist the state by taking an active hand in securing better incorporation laws. In addition, they should encourage state departments to insist upon adequate hospital reports, and, when such are not possible under existing laws, they should cooperate in requesting the legislatures to pass necessary legislation for the purpose. The state is entitled to have complete reports from hospitals and other representatives enjoying a state franchise.

State laws for licensing and inspection of hospitals and dispensaries are as haphazard as those pertaining to general supervision and control. In several states the health departments have authority to inspect certain types of hospitals, including maternity hospitals, contagious disease hospitals, and, in some instances, hospitals caring for mental cases. In a number of other states several different departments have authority to send inspectors into hospitals for various purposes with the result that they are over inspected and little is accomplished. The average hospital desires to be incorporated and licensed by the state, and welcomes inspection at the hands of the state. It is the opinion of the legislative committee that in any state the organized hospitals can make state license and inspection what it really ought to be—a means of protecting the public. After all, hospitals are promoters of public health, and, as such, they have an obligation resting upon them to assist the state in the enactment and administration of health laws. During the next few years the American Hospital Association could very well afford to assist the hospitals in the different states in working out, subject, of course, to the local conditions in each state, an adequate and effective system of state supervision, license and inspection of hospitals and dispensaries.

RECOMMENDATIONS

The legislative committee recommends that a Legislative Service Bureau be authorized by the Association at this convention. Such a bureau should be under the control of the board of trustees and in immediate charge of a director. The duties assigned to the legislative committee by the constitution should be assumed by this proposed bureau, but the committee should be continued in an advisory capacity and instructed to make annual reports to the convention.

In the United States there are over seven thousand hospitals. They represent nearly three-quarters of a million of hospital beds. With allied institutions the number reaches nine thousand with a bed capacity of nearly nine hundred thousand. The large map here on exhibit shows the distribution of hospitals by states. These institutions represent millions of dollars in capital assets, millions in operating expenses, thousands of physicians and nurses, and many thousands of employees. It is a tremendous aggregation of money and personnel. Properly organized in state and national associations, these institutions can wield a mighty influence. They can defeat obnoxious legislative proposals, and compel the enactment into law of modern public health programs. They can make individual members of state legislatures and of Congress, and, sometimes, party majorities, "stop, look, and listen." It is a matter of organization.

Opportunity knocks at the door! It is the logical moment to give the hospitals of this country the chance to speak on legislative matters through a Legislative Service Bureau of the American Hospital Association.

PLINY O. CLARK, Chairman,
RENWICK R. ROSS, M.D.,
LOUIS H. BURLINGHAM, M.D.,
HOWELL WRIGHT, Executive Secretary.

CHART EXHIBITS AROUSE KEEN INTEREST

Members and Guests Display Enthusiasm Over Statistics Compiled by The Modern Hospital—Reproduced by Request

Of unusual interest, especially to state officials and others who are thinking about hospitals and their great development on a broad national basis, was THE MODERN HOSPITAL'S exhibit of seven charts showing the growth of hospitals and allied institutions in the United States, their classification, distribution, bed capacity, ratio of hospital beds to population, and a comparison of the number of hospitals, sanatoriums and allied institutions with the membership of the American Hospital Association by states. The charts occupied a conspicuous place as part of THE MODERN HOSPITAL'S exhibit and were carefully scrutinized by many of the delegates. So marked was the interest that many of the delegates took the trouble to copy some of the detailed figures. Because of this interest and the many requests for copies, the charts are reproduced in the hope that they may have a wider usefulness.

Chart I

HOSPITAL GROWTH IN THE UNITED STATES—1873-1918

(Embracing all classes of hospitals and sanatoriums but excluding allied institutions, such as homes for the aged, homes for the deaf and blind, rescue homes, etc.)

	1873	1918	Increase
Number of hospitals	149	7,158	4700 %
Number of hospital beds	35,453	657,965	1755 %
Ratio of hospital beds to population	1 to 1088	1 to 174	525 %
Population	38,558,371	114,201,039	196 %

Chart II

CLASSIFICATION OF HOSPITALS AND SANATORIUMS BY CAPACITIES—1918

Bed Capacity	Number of Hospitals	Percentage of Total
Under 25	3004	41.97
25 to 49	1766	24.67
50 to 99	1153	16.11
100 to 199	661	9.23
200 to 499	342	4.78
500 to 999	101	1.41
1000 and over	131	1.83
Total	7158	100.00

Chart III

CLASSIFICATION OF HOSPITALS, SANATORIUMS, AND ALLIED INSTITUTIONS ACCORDING TO CHARACTER OF CASES ADMITTED—1918

HOSPITALS AND SANATORIUMS

Class	No. of Institutions	No. of Beds
General	4,863	270,209
Surgical	169	3,518
Tuberculosis	482	38,881
Mental and nervous	539	283,761
Children	63	7,288
Maternity	215	8,995
Contagious	165	17,660
Eye, ear, nose and throat	69	2,289
Industrial	202	6,287
Cripples	40	2,483
Alcoholism and drug addictions	91	3,259
Convalescents	50	3,987
Chronic invalids	56	3,494
Penal	77	3,620
Other special hospitals	77	2,234
Total	7,158	657,965

ALLIED INSTITUTIONS

	No. of Institutions	Capacity
Homes for children	748	109,127
Homes for aged	712	74,289
Rescue homes	184	12,640
Homes for the deaf and blind	117	15,070
Total	1,761	211,126
Estimated number of hospital beds in allied institutions		21,113
Total number hospital beds in hospitals, sanatoriums, and allied institutions		679,078

Chart IV

COMPARISON OF THE NUMBER OF HOSPITALS, SANATORIUMS, AND ALLIED INSTITUTIONS, WITH THE MEMBERSHIP OF THE AMERICAN HOSPITAL ASSOCIATION, BY STATES

State—	Hospitals and Sanatoriums	Allied Institutions	Members A.H.A.
Alabama	88	15	6
Arkansas	70	6	1
Arizona	90	8	0
California	429	44	25
Colorado	123	27	9
Connecticut	88	26	30
Delaware	18	6	4
District of Columbia	30	39	12
Florida	62	10	2
Georgia	89	23	6
Idaho	55	2	0
Illinois	333	102	56
Indiana	176	70	4
Iowa	206	29	11
Kansas	135	23	9
Kentucky	100	46	8
Louisiana	63	35	1
Maine	62	14	8
Maryland	93	65	19
Massachusetts	382	119	109
Michigan	237	51	42
Minnesota	201	38	49
Mississippi	45	8	1
Missouri	183	71	26
Montana	103	10	4
Nebraska	118	19	9
Nevada	37	2	0
New Hampshire	59	22	7
New Jersey	144	63	47
New Mexico	53	3	0
New York	637	131	179
North Carolina	127	16	16
North Dakota	76	4	3
Ohio	304	125	75
Oklahoma	100	10	4
Oregon	93	18	0
Pennsylvania	443	193	157
Rhode Island	46	24	17
South Carolina	54	11	6
South Dakota	76	6	2
Tennessee	107	35	4
Texas	316	34	14
Utah	53	10	3
Vermont	36	10	3
Virginia	111	40	9
Washington	189	31	4
West Virginia	72	9	15
Wisconsin	257	45	17
Wyoming	35	2	1
U. S. Territorial Possessions	154	11	1
Total	7,158	1,761	1,035

Chart V

RATIO OF HOSPITAL BEDS TO POPULATION BY STATES—1918

(Excluding hospitals for the insane and for convalescents)

Alabama	1 to 758	Iowa	1 to 261	Nevada	1 to 145	South Dakota	1 to 287
Arizona	1 to 77	Kansas	1 to 354	New Hampshire	1 to 241	Tennessee	1 to 456
Arkansas	1 to 570	Kentucky	1 to 506	New Jersey	1 to 285	Texas	1 to 468
California	1 to 140	Louisiana	1 to 416	New Mexico	1 to 180	Utah	1 to 283
Colorado	1 to 159	Maine	1 to 330	New York	1 to 171	Vermont	1 to 339
Connecticut	1 to 238	Maryland	1 to 208	North Carolina	1 to 588	Virginia	1 to 394
Delaware	1 to 278	Massachusetts	1 to 179	North Dakota	1 to 345	Washington	1 to 219
District of Columbia	1 to 118	Michigan	1 to 277	Ohio	1 to 278	West Virginia	1 to 441
Florida	1 to 469	Minnesota	1 to 226	Oklahoma	1 to 958	Wisconsin	1 to 263
Georgia	1 to 673	Mississippi	1 to 1222	Oregon	1 to 238	Wyoming	1 to 202
Idaho	1 to 295	Missouri	1 to 305	Pennsylvania	1 to 244	U. S. Territorial possessions	1 to 788
Illinois	1 to 227	Montana	1 to 131	Rhode Island	1 to 235		
Indiana	1 to 297	Nebraska	1 to 286	South Carolina	1 to 771		

Chart VI

CLASSIFICATION OF HOSPITALS, SANATORIUMS, AND ALLIED INSTITUTIONS BY KINDS, NUMBERS, BED CAPACITIES, AND BY WHOM OPERATED—1918

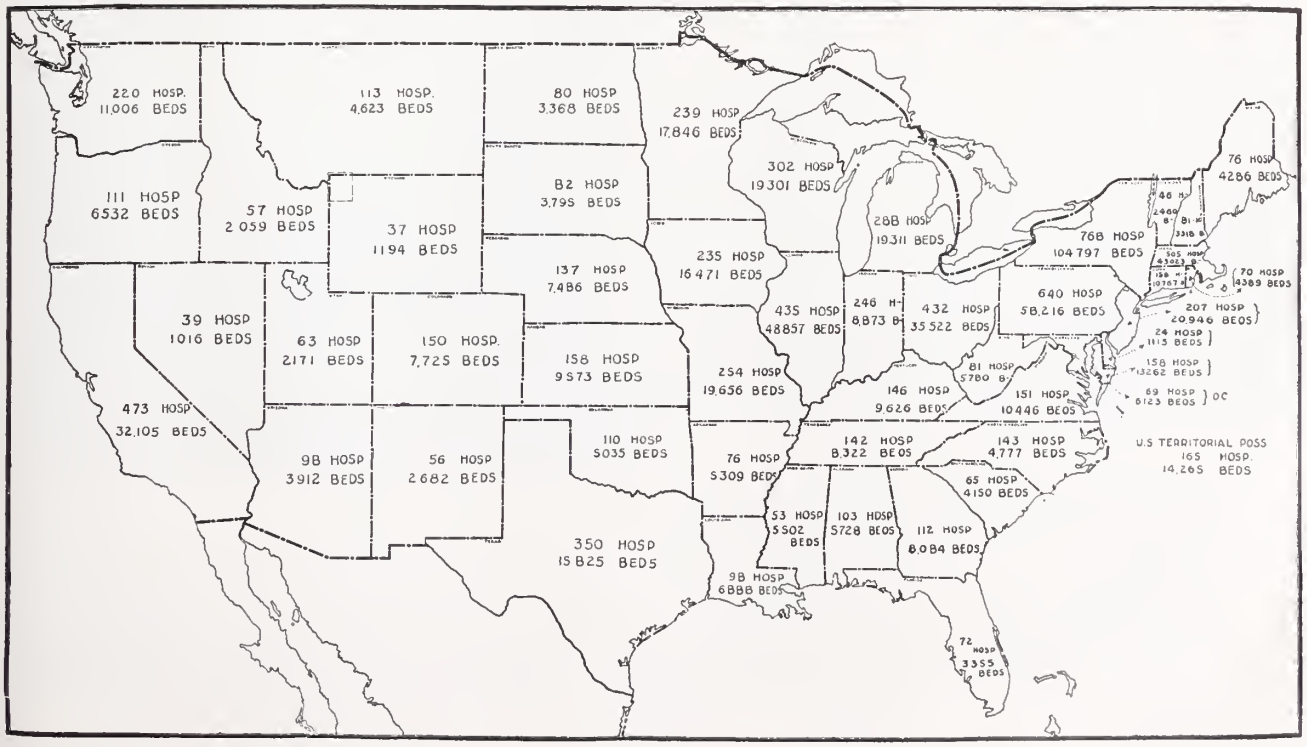
Hospitals, Sanatoriums and Allied Institutions	Public				Private			Total number of hospitals and institutions	Total number of beds	Percentage of beds
	Government	State	County	Municipal	Pay	Catholic	Others			
Hospitals and Sanatoriums—										
General	155	53	192	191	2,406	518	1,348	4,863	270,209	31.10
Surgical	.....	.....	.....	.....	159	6	4	169	3,518	.46
Tuberculosis	9	47	80	45	155	16	130	482	38,881	4.49
Mental—Nervous	3	207	65	13	223	9	19	539	283,761	32.66
Children	.....	.....	.....	5	6	3	49	63	7,288	.84
Maternity	.....	1	1	4	101	19	89	215	8,995	1.05
Contagious	8	18	13	117	.....	2	6	165	17,660	2.04
Eye, Ear, Nose, Throat	.....	1	.....	.....	44	2	22	69	2,289	.27
Industrial	.....	.....	.....	.....	.....	.....	202	202	6,287	.74
Cripples	.....	4	.....	.....	11	3	22	40	2,483	.30
Alcohol—Drugs	.....	2	.....	.....	78	1	10	91	3,259	.39
Convalescents	.....	.....	.....	1	9	5	35	50	3,987	.47
Chronic Invalids	.....	2	2	3	7	11	31	56	3,494	.41
Penal Institution Hospitals	2	64	5	6	.....	.....	.....	77	3,620	.43
Other Special Hospitals	.....	.....	1	1	63	1	11	77	2,234	.26
								7,158	657,965	
Allied Institutions—										
Homes for Children	.....	91	26	11	4	199	417	748	109,127	12.57
Homes for Aged	.....	31	106	20	5	87	463	712	74,289	8.56
Rescue Homes	.....	.....	.....	2	.....	44	138	184	12,640	1.46
Deaf and Blind	.....	72	.....	.....	11	3	31	117	15,070	1.50
								1,761	211,126	

Total number of hospitals and sanatoriums	7,158	Total number of beds in hospitals and sanatoriums	657,965
Total number of allied institutions	1,761	Total number of beds in allied institutions	211,126
	8,919		869,091

Chart VII

DISTRIBUTION OF HOSPITALS AND THEIR BED CAPACITIES BY STATES—1918

(Embracing the total number of hospitals, sanatoriums, and allied institutions and the total number of beds for patients in hospitals and sanatoriums, but excluding all beds in allied institutions other than hospital beds.)


220 HOSP. 11,006 BEDS
113 HOSP. 4,623 BEDS
80 HOSP 3,368 BEDS
239 HOSP 17,846 BEDS
302 HOSP 19,301 BEDS
76 HOSP 4286 BEDS
111 HOSP 6532 BEDS
57 HOSP 2 059 BEDS
37 HOSP 1194 BEDS
82 HOSP 3,795 BEDS
288 HOSP 19,311 BEDS
768 HOSP 104 797 BEDS
137 HOSP 7,486 BEDS
235 HOSP 16,471 BEDS
640 HOSP 58,216 BEDS
207 HOSP 20,946 BEDS
39 HOSP 1016 BEDS
63 HOSP 2171 BEDS
150 HOSP. 7,725 BEDS
158 HOSP 9573 BEDS
435 HOSP 48857 BEDS
432 HOSP 35 522 BEDS
254 HOSP 19,656 BEDS
146 HOSP 9,626 BEDS
151 HOSP 10446 BEDS
473 HOSP 32,105 BEDS
98 HOSP 3912 BEDS
56 HOSP 2682 BEDS
110 HOSP 5035 BEDS
76 HOSP 5309 BEDS
142 HOSP 8,322 BEDS
143 HOSP 4,777 BEDS
U.S TERRITORIAL POSS 165 HOSP. 14,265 BEDS
65 HOSP 4150 BEDS
53 HOSP 5502 BEDS
103 HOSP 5728 BEDS
112 HOSP 8,084 BEDS
350 HOSP 15 825 BEDS
98 HOSP 6888 BEDS
72 HOSP 3355 BEDS

FIRST MEMORIAL TO AMERICAN WOMEN WHO MADE SUPREME SACRIFICE

Silk Service Flag With One Hundred Ninety-Eight Gold Stars Commemorates Heroism of Red Cross Nurses Who Have "Gone West"

Among the white crosses of the American Expeditionary Forces in a military cemetery at Base Hospital No. 69, Savenay, France, with the trim gardens, the walled-in orchards, and the low hills of Brittany in the distance, Jane A. Delano rests quietly among the American dead, while at National Red Cross Headquarters, Washington, D. C., one of her associate nurses in memory of her has sewed a gold star—one of the last of the 198 to be added —upon the service flag of the department of nursing

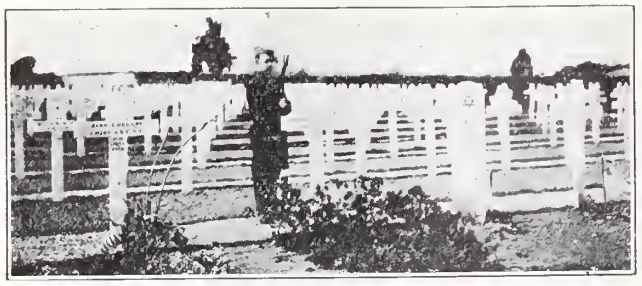


Fig. 1. Quiet God's acre where Jane A. Delano sleeps.

which she organized and directed, and to which she gave her life April 15, 1919.

She was buried temporarily in the military cemetery at Savenay. When military regulations permit the bringing of her body to America, it will rest permanently, in accordance with her expressed wishes, in Arlington National Cemetery.

This great silk flag, enshrined over the first landing of the marble staircase above the tablet dedicating to the use of the American Red Cross the marble building erected "by a grateful government in memory of the heroic women of the Civil War," is the first memorial to the American women who laid down their lives for liberty in the world war. A single blue star represents 19,877 Red Cross nurses in active war duty with the Army and Navy Nurse Corps and the Red Cross; some in barracks-like cantonment hospitals in this country; some in the long wards of the American Expeditionary Force bases; others among the repatriates and little frightened children of the devastated sectors; still others in evacuation stations on duty for thirty hours without relief in the closely-curtained, brilliantly-lighted, operating rooms, or groping their way in the darkness from one stretcher to another in the crowded corridors, while the Hun bombing planes soared above; a few going ahead with "shock teams" and mobile operating units "where there's a flash of light the roar of the guns, and the very earth rocking under your feet as you fumble for your helmet and gas mask."

In memory of the Red Cross nurses who have "gone west," 198 gold stars cluster about this star of blue. The first two to appear were for Mrs. Edith B. Ayres and Miss Helen Burnett Wood, of Chicago, Ill., both of whom were killed by the explosion of a defective shell on the S. S. Mongolia, May 20, 1917, while on their way to France with the early units.

War had found the Red Cross Nursing Service prepared to face the tremendous needs for trained women to follow the troops to the training camps, to the ports of embarkation, and across to those straining, exhausted lines of the French and English. American nurses as well as soldiers began to move steadily and silently down to the camouflaged transports. November 1 found three thousand Red Cross nurses in active military service in this country and "over there," while the names of fourteen thousand stood on the Red Cross rolls awaiting assignment.

Then as the movement of troops continued, word began to come back to the Red Cross headquarters regarding the services of American nurses, their adaptability, their skill, their devotion to duty, finally of bombed hospitals, of disease, accident, and death following exposure, long hours of duty, and the endless heart-breaking work of binding up of the wounds of war.

One by one the gold stars began to appear until the influenza had claimed eighty-one nurses in military camps in this country alone. Two sisters, Viola and Ruth Lundholm, of Oakland, Cal., contracted this disease while on their way to France and were buried together at Magdalen Hill Cemetery, Winchester, England, while others slipped quietly away in Scotland, in France, and in Belgium. Even in Germany there is a white cross marking the grave of Jessie Baldwin of Summerville, Pa. She began her war service as army nurse at Walter Reed Hospital, Washington, D. C., was ordered overseas, cited for extraordinary heroism when her hospital was shelled, and

Fig. 2. Affixing the symbol of Jane A. Delano's supreme sacrifice.

finally sent with the army of occupation into Germany, where she died in line of duty, February 6, 1919, at Coblenz. One of the last of the stars added to this sacred constellation—the one that represents the supreme sacrifice of Jane A. Delano, director-general of the department of nursing—is here seen being affixed.

"The Lady with the Lamp" has become a holy tradition to the British soldier who fought in the Crimea. Ask the American doughboy in his turn what he thinks of the army nurse, in her slicker and boots, or in her grey ward uniform with the scarlet lined active service cape flung back over her shoulder! She has carried the ideals of Florence Nightingale and those other pioneers almost to the front lines of war. Wherever she has gone, she has brought cleanliness, order, and peace, while these two hundred Red Cross nurses, from the youngest graduate who stepped so eagerly from the doors of her training school into the hardships and privations of war-service, to their great leader Jane Delano, have proven forever, in company with the other American dead, that "greater love hath no man than this . . ."

AMERICAN RED CROSS STAMPS OUT TYPHUS IN SIBERIA

The Allied Anti-Typhus Train Operating in Siberia Has Done a Great Work—Urgent Need of Help to Keep Down the Dread Disease

The Allied anti-typhus train which has been operating in Siberia, under Red Cross direction, for the past six months, and which is known throughout that country as the "Great White Train," is now stationed at Perm, where the doctors and nurses are combatting a recent outbreak among the soldiers and civilians there.

The train was built by the American Red Cross for the Allies and was intended first for the maritime provinces of Siberia. The tremendous epidemic of typhus in the heart of the winter ran up the number of hospital cases enormously, while the unreported cases numbered many more, making a total of hundreds of thousands.

The "Great White Train" of the Allied Red Cross operating in Siberia.

So the Great White Train went west, long cars for bathing men, women, and children, unwashed for months; cars for hair-cutting; for sterilizing clothing; cars loaded with garments and medicaments, began the work of mercy, alleviation and prevention. Testimony as to the good work accomplished by the expedition comes from officials and others who were at first skeptical as to the good resultant. When typhus began to die out in the beginning of summer a question arose as to what would be done with the train, General Knox, head of the British Military Mission, who knew of its operations, telegraphed to Vladivostok, "The train has done grand work; it must not be scrapped."

In every place visited the train officers arranged conferences with leading officials, military and civil, who were in charge of the sanitary, medical or surgical work, and placed the facilities of the Red Cross at their service. Physicians aboard of the train were sent out to make separate examinations as to the needs of the several hospitals. Expert plumbers and engineers from the train also were sent out to examine bath-houses and disinfecting apparatuses used by the Russians. Authentic information was compiled on which the Red Cross will base further operations against typhoid.

Many towns were found without adequate sterilizing equipment. The Red Cross will meet this need next winter through the construction of at least two hundred sheet-iron sterilizers of the Russian type, which has proved simple in operation and effective in disinfecting clothing. Accurate information has been gained on which to base further operations.

While the Russian army will be better equipped to fight typhus the civilian population is well-nigh helpless in the face of the economic famine of Siberia. But little new clothing has been sent into this country. Large amounts of relief goods have been sent by the American Red Cross but the supply is by no means equal to the demand. Every garment counts in the face of the staggering necessity of the people.

OHIO VALLEY HOSPITAL'S SCHOOL OF NURSING

Class Work Given During Day, Leaving Evening for Recreation or Rest—Program Includes Play as Well as Work

The *Ohio Valley General Bulletin*, a bi-monthly publication concerning the progress of the Ohio Valley General Hospital, Wheeling, West Virginia, has each month an article devoted to some major feature of the hospital, news notes, and little items to build up the morale of the staff.

The July number is largely devoted to the school of nursing. Unlike many hospitals, the class work is given during the day, and not after duty hours in the evening, which leaves that entire period for recreation or rest.

The curriculum includes massage under an instructor from Pittsburgh, Pa., and an intensive course in chemistry given at the Wheeling High School under the direction of Prof. C. H. Ebers to those pupils who have not had the

Ohio Valley General Hospital, Wheeling, West Virginia.

subject before entrance. Through the cooperation of the medical staff, a splendid lecture course is given, and there is systematized and continuous class work in all subjects under competent instructors. A three months' course in public health nursing was added last year with some field work in connection. A strictly fifty-two-hour week has been authorized, and is to be put into effect as soon as possible.

JUST A QUIET SUNDAY MORNING

The Tale of a Day That Began at Dawn—With a Chance Remark That Caused a Mental Upset

On the particular Sunday whereof I speak, I was roused from a feathery dreamland at 3 a. m. and 5 a. m., respectively, to witness a twenty-four-hour section case with symptoms of developing pneumonia—which meant, of course, that, in those early hours of darkness, I had to send for the patient's physician, take the proper emergency measures, rush out danger notices to the nearest relatives, and do all the various other things connected with a case which hovered between life and death.

At 7:30 I hurredly snatched breakfast and reported for duty at 8:00, to supervise diet kitchen tray service and receive night reports from special and night nurses. From 8:30 to 9:30 I distributed the day's supply of linen, after which I had to telephone several doctors and report on the condition of their patients. These preliminary duties completed, I "made the rounds," which meant seeing some forty-odd patients and stopping long enough with each one of them to make them feel that they were getting the individual attention to which they were entitled. Between visits, of course, there were numerous telephone inquiries regarding the condition of patients which had to be answered, engagements for future cases which had to be made, and a new patient who had to be admitted.

Just as I started down the hall hurriedly on an errand, a shrill ring on the telephone called me back to divulge the following information: "This is Mrs. Smith's sister. She was to come home today from the maternity floor, but her husband celebrated last night and is now in the hands of the police. Please tell her." Mrs. Smith was accordingly visited and consoled. A call to the third floor followed. The newest baby was not breathing properly and my help was needed at once.

In the odd moments which I was able to snatch from all these various demands on my time, I dusted the operating and sterilizing rooms, set up dressing trays, gave out surgical supplies and did four surgical dressings. This being Sunday morning, it was the time, too, to straighten out closets and book-cases and do the odd jobs for which there was no time on week days. The floor nurses had to be helped with their routine work, for half the staff were off duty on Sunday morning. The departure of two patients meant seeing them off and listening patiently for a full half-hour while they expressed gratitude for the benefits conferred, after which several members of the attending staff asked my company in calling on their patients.

Just as I stopped for a moment to make a choice from the hundred or so tasks which confronted me, a call from the office informed me that Mrs. So-and-so, a convalescent neurastheniac, permitted to go for a walk unattended, had suffered a serious fall—which meant that I had to get her back to bed at once and quiet her hysteria. The visit with the chief of staff which followed was indeed a pleasure, and one of the few recompenses of life.

During all of this mad scramble, of course, it was my place to look cool, composed, and spotless—also, to give the impression that I had plenty of time to talk to visitors and to admire the new cars and neckties of the visiting staff.

And then, as the ceaseless round of tasks seemed to give way to a brief respite, the man who could not decide came along. He was a man of forty who, in his youth, had committed the old, old sin and now, at the time when he should have been in his prime, was reaping the consequences of his early folly. He took down the telephone receiver and held it to his ear. Just as he was about to give his number, the operator broke in on the line suddenly, with disastrous results. His mental powers suffered a severe shock; his brain balked and refused absolutely to function. Motionless and speechless he stood there, while his face reflected the fact that, in a realization of his condition, he was undergoing an agony of shame and fear. Just a broken wreck of manhood, this poor bit of humanity was now able to perform only the automatic and routine activities of life, such as going to bed, arising, shaving, dressing, etc. While things followed a mechanical circuit without interruption he was able to guide himself fairly, but once off the track he was as helpless as a child. He had to be rescued quickly from this tragedy of the telephone and helped back to his room with suggestion and sympathy.

Noon and the dinner bell—blessed relief! As I passed swiftly down the hall, breathing a solemn prayer of gratitude for this breathing spell and looking forward with anticipation to thirty whole minutes which I might call my own, I caught this snatch of a conversation which floated out to me from an alcove: "That one? Oh, she's the head nurse. She doesn't do any work around here. She only floats around!" I disappeared quickly, to drown my disapproval of the universe in a cheery cup of tea.

BLIND NO LONGER OBJECTS OF CHARITY

"Double-Duty Finger Guild" Discovering New Opportunities for Those in Physical Darkness—Contact With Fellow-Workers Helpful

Dr. Schuyler Skaats Wheeler, of the Crocker-Wheeler Company, manufacturers of electric machinery at Ampere, N. J., realizing that many men would return from the war blinded, set out to find a way in which they would be able to compete on an even footing with other workers. According to the *Vocational Summary*, he has discovered a place where this can be done, removed from the taint of charity.

One occupation is armature winding. Winding the coils requires deft fingers and great care and the blind are peculiarly adapted to it by their sensitive touch and caution. As the demand for these coils is inexhaustible, there will always be a way open for the blind to become self-supporting.

"The double-duty finger guild," as the blind workroom in the factory is called—a description of which was published in THE MODERN HOSPITAL January, 1918—has been established and the work there has been steadily increasing. The policy of the guild is to find work for the blind in factories, as this kind of work pays more on account of the great demand for it, and in addition brings them into contact with their fellow-workers.

Since a beginning in this kind of work was made, numerous other trades in factories that are suitable for the blind have been discovered. Some of these are sticking pins into cards; twisting wires for telephones; cutting material and helping put strips on automobile tires; weighing and stacking rotor cores; assembling and riveting pole shoes; sorting rotor punchings and dozens of others.

Skilled workers receive fair compensation, and even the unskilled may make a living wage; so that no one need feel that he is shut off from his kind because of his affliction, or that his sacrifice for his country bears nothing but the bitterness of charity.

TRAINING VERSUS VOLUNTEER SERVICE IN NURSING

Profession Calls for Highest Type of Womanhood—Time, Strength, and Ability to Submerge Personality in Patients' Welfare, Prime Requisites—Only Experienced Meet Supreme Test Successfully

"Trained nursing ought to appeal to every young woman who is interested in the physical welfare of her countrymen," writes Edna L. Foley in the *Presbyterian Hospital Bulletin.*

"There are two kinds of nursing: One, familiar to the public mind, prompted by desire and sentiment, a mixture of pillow-smoothing and sleepless nights; the other, infinitely more valuable, and less well understood—the nursing backed by the rigid, careful, technical training."

The biggest part of nursing implies a coordination of head, hand and heart; an automatic symphony of observation, detection and action; the study and recognition of symptoms—what is significant and to be reported to those higher in authority, and what can with safety be apparently overlooked.

The following true stories are illustrative of the two types of nurses:

In a German military hospital where some American Red Cross nurses were working, a soldier who had suffered amputation of the leg just below the hip was in constant danger of fatal hemorrhage. In consequence, the surgeon had given orders that a rubber tourniquet, to be applied in just such emergencies, should be left on the man's table day and night; that under no condition whatsoever was it to be removed. On the third day the anticipated happened—the hemorrhage occurred. The tourniquet was not in its place, and in ten minutes everything was over. The man lost his chance for life simply because the one thing most needed was lacking.

When a volunteer worker who had charge of the patients on that side of the ward returned from her hours off duty, she was asked about the tourniquet. She replied promptly, "It is in my cupboard, and I have the keys here. I was told that it was very valuable, and that I was not to let it get lost. Consequently, whenever I left the ward, I locked it up first."

This woman was a person of intelligence and good intentions, and was untiring in her service to the wounded men; but to her medically untrained reasoning there was no distinction between the two orders—the one, that an expensive bandage should not be lost; the other, that a bandage needed to save a human life should never be removed from a certain spot.

In contrast: A visiting nurse, rather new in district work, after securing fresh supplies at her substation, prepared to go out again directly. As the nurses ordinarily stopped for luncheon and to complete their clerical work of the previous day, the supervisor inquired as to the cause of her hurry. Her explanation was that she was returning to a certain maternity case. Just why, she did not know. The patient appeared normal in every respect, and had been dismissed by the doctor; but her color was not good, and the nurse felt that something was wrong.

The supervisor, to quiet what she considered the unnecessary anxiety of the nurse new in the field, and to see for herself if she were correct in her suspicions, accompanied her. The mother-in-law, surprised at the return of the nurse, assured them that while the patient was pretty quiet she was all right. To the trained eyes of the two nurses, she was anything but all right. Examination proved that she was suffering from a profuse post-partum hemorrhage.

While one nurse went for the physician, the other elevated the foot of the bed and started treatment. Within an hour the physician and the two nurses had checked the hemorrhage and had saved the mother's life.

When asked how she knew the young mother was in such a dangerous condition, the nurse replied vaguely, "I didn't know. But one can't work over and with three hundred similar cases and not know when a woman's color is abnormal. One can't handle three hundred such patients and not recognize danger when it begins to assert itself."

Another result of training is the ability to perform automatically certain routine duties so that the mind may be left free for greater responsibilities. Slow, steady, training in speeding up stiffens one's mental, moral, and physical caliber so that when the big test comes, one is able to stand the long hours, the inevitable strain, and the frightful weariness.

Nursing is not drudgery, nor when the life of a human being is at stake can any service that makes it possible for that soul to "carry on" valiantly be considered beneath the dignity of any woman. Training and experience beget confidence. Only by taking literally thousands of pulses does one learn the fine distinctions in pulses known to the initated. They can not be detected by instinct, nor taught by a correspondence course. To some the human body may be considered a little city of sewers; to others it is the temple of the holy spirit for which no service is menial or degrading.

Even the college-bred girl, while she may find some handicaps in her individualism, her somewhat desultory habits of thinking, and her inability to apply herself steadily to uncongenial or disagreeable tasks, can find adequate utilization of her powers in nursing. And she has much to give to nursing—her mental equipment, her sense of fair play and team work, class spirit, and belief in service.

With the nurse, as with the soldier, the hardest lesson to learn is that of self-subordination to a higher and bigger personality. She must learn to sacrifice everything which belongs to her, individually, to a cause that is far greater than any personal ambition. Training, however, can only give back to any woman what she is willing to put into it, but it will make the worth-while woman an enormously valuable asset to herself, to her community, and to her country.

A Medical Staff in 1633

The medical staff of St. Bartholomew's Hospital, in 1633, consisted of two physicians, three surgeons, a surgeon for the stone, a "guide, or surgeon" to the Lock Hospital in Southwark, a "guide, or surgeon" to the Kingsland Spital, an apothecary, a curer of scald heads, and up to that time there was a bone-setter, or surgeon for fractures and dislocations. The curer of scald heads was generally one of the fair sex, who seems to have been well paid.

The Egg Market in the Balkans

The mountain districts of the Balkans have suffered intensely from the war. For five years, they have been able to obtain no clothing and very little food from surrounding towns. The American distributions of clothing are a big event, and celebrated elaborately. In Pitesci, the mountaineers presented very formally a basket containing two eggs, all that could be obtained in the district.

FIRE ALARM SYSTEMS AND FIRE DRILLS IN THE HOSPITAL

Mechanical Devices Within the Reach of Every Hospital —Necessity for Discipline and Concerted Action in Emergencies

Regardless of its type of construction, no hospital or institution of twenty-five beds or over should be without an adequate method for giving a fire alarm and a religiously observed fire drill, encompassing every person under its roof in an employed capacity. The latter is of even more importance than the former.

Taken as a whole, the majority of hospitals in this country are woefully deficient in protective measures against fire, both in physical means in combating or nipping it and in any plan of definite action in case of fire. The first requisite in protection against fire is the use of all possible care in not letting one happen; the second is the assurance of recognizing its existence quickly when it does happen; and the third is to be provided with readily accessible means of extinguishing it. The first two or three minutes are the vital ones in a fire and, as a rule, more may be accomplished in this initial space of time than in the next sixty minutes. Even in centers well served with fire departments and modern apparatus, the time of arrival and action is seldom under eight minutes from the giving of the alarm.

An ideal alarm for a hospital would be one that would notify the employees while keeping the patients in ignorance, but such a system is not possible of attainment at the present time.

Alarm systems are of two cardinal types, the automatically operated and the manually operated. There are two ways of conveying an alarm—visual and audible. The first of these is not adaptable for hospitals, and either type, despite modern inventive genius and progress in electrical equipment, is still a goodly distance from perfection. The automatic type, which is designed to detect fire of its own accord, is dependent for action upon a sudden and undue rise in temperature acting upon the expanding qualities of two delicately adjusted strips of certain metals or upon a thermostat; the expansion will form an electrical contact which will cause a bell or bells to ring or annunciator keys to drop; the approximate location of the fire will be given by strokes of the bell or numerals on the annunciator board, the diversity of which is dependent upon the number of electrical circuits in the building. Another form of the automatic alarm is the air-circuit type, which consists of a small metal tube usually of copper and about the diameter of a pencil lead; this is carried around or through the upper part of a room or hall and under the shelves of linen closets, storerooms, coal bins, etc., and terminates in a diaphragm or set of diaphragms located in the office or main corridor; like the other type, this system gives the location of the fire according to the number of air-tube circuits installed.

Of the automatic systems, this expanded air-tube type is the most reliable and has the additional advantage that it is easy to test and covers from ten seconds to two minutes for its acting.

Manual systems of themselves do not detect fire but simply permit of a quick alarm being given through conveniently located stations by human agency after the fire has become apparent. These stations or signal boxes are usually small metal boxes located in the corridors, wards, and other conspicuous places, in which the breaking of glass or the turning of a key communicates a general alarm and either discloses the fact that there is a fire somewhere or a fire in a specific location, according to the amount of registering apparatus and the number of electrical circuits in the building.

Both kinds of alarms can and should be connected with the city fire department system where one exists, so that the giving of an alarm within the hospital will automatically register it at the nearest engine house, conserving the time required for telephoning or for an excited search for a public street-corner box.

A system to announce the exact location of a blaze is not so much dependent upon mechanical efficiency as it is upon the amount of money that is to be put into an alarm system, and it would be next to impossible here to give any set of figures regarding the cost of one, owing to the fact that conditions, needs, and structures are so varied. In a hospital of fifty beds, three stories in height, and under one roof, the installation expense for an automatic equipment of proper range could be figured to come between $400 and $450.

A manual system can be a simple push button, battery, and gong, costing from $7.50 up.

An alarm system is worse than useless unless it is tested out at frequent intervals (at least once a week), and more than one large institution in this country is the possessor of an elaborate alarm system, costing up into the thousands, which has not been given a test for the past year or more. The administrators of these institutions are cheerfully going along with a false sense of security, believing that the system will perform its function in time of need. This is well and good if the need never arises, but, if it does, human lives are apt to pay the toll of negligence.

Five types of portable fire extinguishers are in use today. First is the bottle or hand-grenade type, usually a bomb-shaped glass container which is to be thrown into the flames with sufficient force to break it and release its chemical contents; it is, therefore, practically dependent upon proper aim for its efficiency. This kind is almost obsolete and should not be considered.

The powder type, a tin tube 24 or 25 inches long holding three or four pounds of dry chemical, is all right under certain conditions but its efficiency, too, is dependent upon the force and accuracy of aim with which its contents are thrown, and these qualities are not often found under the stress of excitement which usually attends the use of a fire extinguisher.

Third is the sulphuric-acid and soda fire extinguisher, a brass container holding two or three gallons of water in which a few ounces of caustic soda have been dissolved and containing in its neck a small bottle of sulphuric acid. When the extinguisher is inverted, these elements mix and generate pressure sufficient to play a $\frac{3}{16}$-inch stream with considerable force upon the blaze. The advantages of this type are the length of time it is in action and the fact that the range or reach of its stream renders it valuable in fighting inaccessible blazes in the ceiling and at a distance when it is necessary. Its disadvantages are that in an oil or ether fire the force of the stream tends to scatter the burning fluid and do more harm than good. It is dangerous upon an electrical fire of any unusual voltage, as its stream is apt to establish a circuit between the operator and the power feed; and its contents are ruinous to draperies, furniture, carpets, etc. Cleaning up after its use is apt to be quite a job. It is, however, a good extinguishing agent to have, especially in the kitchen and around the furnace or boiler room.

What is without doubt the best form of fire extin-

guisher for hospital use today, especially in the hands of a woman, is the "gun" or tetrachloride type, a small quart-size brass tube operating either on the plunger-pump principle, like a large hypodermic or by self-generated pressure from the breaking of a carbonic capsule or cartridge within itself. The latter type is much preferable.

This extinguisher is a very effective one in grease, naptha, or volatile-fluid fires and electrical disturbances occurring around elevator machinery and switchboards or cabinets. The filler is a chemical composition which upon striking flame or heat above a certain degree is converted from a liquid into a dense fog or gas blanket which smothers the fire. This is a comparatively new form of fire extinguisher, but there are five or six makes on the market at prices ranging from $6 to $10 and with the trade names usually ending in "rene" or "ene." Refilling fluid costs from $3 to $4 a gallon, but a few squirts accomplish the work in a majority of instances, so it is not an expensive proposition, and the unused portion of any charge may be conserved for future use.

Last but not least, is the sand bucket which will "douse" a fire under some conditions quicker than anything else. It is a good idea to keep two or three covered pails of dry sand, painted red, in the building, one in the laboratory of pharmacy, one in the kitchen, and another near the bottom of the elevator shaft. The sand should be dried thoroughly and mixed with a few small lumps of chloride of calcium and the pail lid sealed with a strip of adhesive plaster so that there will be no temptation to use it as a cuspidor.

New and more effective ways of fighting fire may be perfected but the one chief aid is, always has been, and always will be cool headedness, and the prime antidote to fear and panic is force of habit. The advantages of concerted, methodical action in the case of an emergency can not be overestimated, and, when people have been drilled week in and week out to assume a certain station or to perform a certain duty in time of danger, they will automatically follow the routine when the time comes. Drills should not be less frequent than once weekly and they should be called by a slight tap on the alarm at the time of testing.

Given here is a sample of a fire-drill card which should be posted in several conspicuous places about the building. This is more to give an outline or show the principle of emergency discipline than to give any set rule or custom, for conditions vary so widely in each place that the pertinent arrangement of this station card is dependent upon individual conditions.

The element of cause in fires is a wide one, but plain human carelessness in one way or another is the cause of the large majority of them. Faulty electrical installations or wiring are a prolific cause, though not quite so much as most reports of the probable cause of fires would indicate, for the blanket reason of "crossed wires" is a handy one when the real cause is not known. The consumption of cigarettes which smoulder long after being cast away are a big factor in present-day fire statistics. Cigarettes should not be allowed in a hospital outside of the main corridor or business offices, and any violation should merit a reprimand from the superintendent.

As to minimizing the chances of fire in a hospital, the following are skeleton provisions around which minor precautions may be evolved:

1. Eliminate all articles of celluloid such as thermometer backs, toilet appurtenances, etc.
2. Do not purchase cheap matches; they are dangerous.
3. Use ether in as small containers as are practical and crush the empty cans; an empty ether can near a flame is a menace.
4. Don't use metal polish or cleaning fluid in which the base is composed of benzine or naptha.
5. Do not put off the repair of any disorganized electrical wiring or equipment, but have it remedied as soon as noticed, and, in any new extensions, have the wires run in conduits and terminate in metal junction boxes.
6. Don't bask in the delusion that because the building you are in is fireproof you are immune from danger; "fireproof construction" has covered more sins than charity ever attempted.
7. If you build again, secure an architect who knows what fireproof construction means. Concrete and metal do not mean fireproof; they are merely slow burning unless constructed with attention to drafts and confinement of fire.

Actual cremation causes few deaths in fires. It is suffocation, panic, and trampling that furnish the casualty list.

FIRE STATIONS

Upon the sounding of fire alarm, each employee will immediately seek his or her station as given below.

OFFICE ATTENDANT—Will immediately notify fire department and see that all records and valuables are locked in safe or removed and that main exit is free from all obstruction.

SUPERINTENDENT—In charge of extinguishing apparatus, corridor, hose, etc.

HEAD NURSE—In charge of nurses and removal of patients.

FIRST ASSISTANT NURSE—In charge of wheel stretchers, blankets, and removal necessities.

MEDICAL STAFF—Will assist in removal of private patients at the direction of the head nurse.

SENIOR INTERN—In charge of elevator.

FEMALE WARD.	MALE WARD.
Miss	Miss .....
In charge of beds No. 1-2-3.	In charge of beds No. 1-2-3.
Miss	Miss .....
In charge of beds No. 4-5-6.	In charge of beds No. 4-5-6.
Miss	Miss .....
In charge of beds No. 7-8-9.	In charge of beds No. 7-8-9.
Miss	Miss .....
In charge of beds No. 10-11-12.	In charge of beds No. 10-11-12.
Miss	Miss .....
In charge of beds No. 13-14-15.	In charge of beds No. 13-14-15.

HOSPITAL ACTIVITIES OF CHURCH TO BE COORDINATED

Rapid Growth of Hospital Movement in Methodist Episcopal Church Makes Creation of Supervisory Board for Charitable Institutions a Practical Necessity—Movement to Be Urged at Next Conference

The creation of a board of philanthropies, to supervise all charitable institutions under denominational auspices, is a piece of legislation to be proposed at the next General Conference of the Methodist Episcopal Church. The hospital activities of this denomination have assumed the proportions of a world-wide movement. Forty-seven institutions of healing, with a property and endowment value of $16,000,000, treating annually 100,000 patients, exclusive of out-patient departments, have sprung into existence in the United States within the brief period of thirty-one years. Homes for the aged and orphanages are rapidly multiplying. It is believed that after-war conditions will accelerate future increase, and, in order that the development shall be orderly and intelligently regulated, a board of philanthropies is urged.

This board would have power to erect standards of institutional efficiency in conformity with standards maintained by the legislatures of the several states. It would constitute itself an accessible medium for helpful interchange of ideas. It should have funds for the widest dissemination of useful information and should establish a repository for collected data and statistics. One result of the creation of such a board would be to raise the institutions involved to the dignity of a general benevolence, generally recognized as denominationally representative. It would also result in the establishment of a number of sadly needed homes for incurables.

HOSPITAL, MEDICAL AND SPECIAL MEETINGS

FIRST LARGE CONFERENCE OF OCCUPATIONAL THERAPISTS

Plans Made at Enthusiastic Meeting for Promoting Work as Curative Agent—Field for Reconstruction Aides Broadening—Improvement of Producer Rather Than Production Chief Aim

That occupational therapy as a curative agency for the afflicted in body or mind is slowly, but surely, coming into its own was the keynote of practically every address delivered at the third annual conference of the National Society for the Promotion of Occupational Therapy which was held at Hull House, Chicago, September 8 to 11 inclusive. The occupational aide was eulogized, and the conviction was generally expressed that occupational therapy offers an ever-broadening field for women trained along that line.

The growth of the society has been phenomenal. When it was founded three years ago, six people were present at the meeting which was held in New York. At the third conference—which was the first really large one—more than three hundred were in attendance, and a large number of those not already members were admitted to the organization.

The sessions were held at Bowen Hall, Chicago State Hospital at Dunning, and the Henry B. Favill School of Occupations. The exhibits were arranged on the second and fourth floors of the Henry B. Favill School. Mrs. Eleanor Clarke Slagle, chairman of the program committee, was assisted by aides now in state service and by members of the faculty of the Henry B. Favill School, all of whom were garbed in gray aprons. Mrs. Slagle also presided at part of the sessions.

The morning of September 8 was taken up entirely in reading reports of the officers and of the various committees, and in the election of officers. Mrs. Eleanor Clarke Slagle, superintendent of the occupational therapy department of Public Welfare of Illinois, and director of the Henry B. Favill School of Occupations, after some friendly rivalry was declared president. She declined to serve, but was afterward persuaded to reconsider. Dr. Herbert Hall, Devereaux Mansion, Marblehead, Mass., was elected vice-president; Louis J. Haas and Miss Marian R. Taber, secretary and treasurer, respectively, were re-elected. Four new committees were appointed to have special oversight in all matters pertaining to tuberculosis, mental and nervous diseases, cardiac afflictions, and orthopedics. Douglas McMurtrie, of the Red Cross Institute for Disabled Men, New York City, was appointed chairman of the International Committee, which is to work in connection with European representatives.

The program consisted of addresses by men and women who have successfully demonstrated the benefits of occupational therapy in practically every line to which it has been considered applicable.

At the opening session, after the invocation by S. D. McKenny, LL.D., Dr. H. Douglas Singer, state alienist of the Illinois Department of Public Welfare, welcomed the visitors to Illinois, at the same time delivering a message from Governor Lowden to the effect that, of all the progress made in the state institutions, he was most impressed by what has been accomplished in occupational therapy.

Miss Jane Addams very graciously bade the visitors welcome to the community, and Dr. William R. Dunton, Jr., in responding, declared he felt "real chesty" over the nice things the two previous speakers had said regarding the work of the society.

The program covered practically every phase of the work so far as it has progressed during the comparatively few years occupational therapy has been tried out. Men and women, all prominent in their respective lines, told what has been done in the various state institutions, tuberculosis sanatoria, army hospitals, and overseas. All were earnest and optimistic. Contrasts were drawn between the well-equipped workshops in which the work is carried on in this country, and the makeshifts in France which, however. did much in keeping up the morale of the wounded of the expeditionary forces; also between the soldier and civilian patients.

Some of the points emphasized were the necessity of keeping clearly in mind that the results to be expected from occupational therapy are not necessarily things produced, but the improvement of the producer; that the goal is mental occupation rather than physical; and that, while occupational therapy is closely related to vocational training, the two should be kept separate and distinct.

The grading and systematizing of therapeutic occupations as done at Devereaux Mansion, Marblehead, Mass., were explained by Dr. Herbert Hall, who expressed the hope that some standard system might be devised for use in all institutions where occupational therapy has been or may be introduced.

Fig. 1. Products of busy minds and hands at Fort Sheridan.

Fig. 2. Reed work and weaving assist in curing the patients at Phipp's Clinic.

Difficulties encountered by the workers were brought out in the addresses and enthusiastically discussed in the Round Tables. The one most frequently to be overcome is the apathy of the patient, and the aides feel that it is indeed a red-letter day when they get the obstinate ones sufficiently interested to "cuss" over what seems to them the intricacies of their first little problems. Another difficulty is lack of cooperation between ward surgeons and the aides and social workers.

The exhibits in themselves nothing short of wonderful, ranged from the crudest wooden toys to perfect models of automobiles and airplanes, and from rag dolls to beautifully woven bedspreads. A tiny cottage was completely furnished from the gas range and ironing board in the kitchen to the window boxes on the outside of the sun parlor. Everywhere there were baskets, beaded and knitted articles, and a windmill which pumped real water.

Among the exhibitors were the state hospitals at Dunning and Elgin; Cook County, Michael Reese, Presbyterian and Fort Sheridan hospitals; Phipps Clinic, Johns Hopkins; Sheppard and Enoch Pratt; Philadelphia School of Occupational Therapy; Montefiore Home, Hospital, and Sanitarium; St. Louis School of Occupational Therapy; Chicago Light House; Marine Hospital at St. Louis and the Henry Favill School of Occupation.

There were a number of entertainment features, including luncheons at Hull House, a visit to Chicago State Hospital at Dunning, where part of the program was rendered, and a banquet in the Florentine Room of the Congress Hotel. Visits to various city hospitals and to Fort Sheridan were made, and the last day was given over to a trip to Milwaukee.

The concluding program, which was to have been given the morning of September 10 was postponed until evening, the addresses being delivered on the fourth floor of the Henry B. Favill School of Occupations.

VOCATIONAL REEDUCATION OF THOSE WHO HAVE LOST AN ARM

Workers in Functional Reeducation Urge Necessity of Training Remaining Arm or Stump of Amputated Limb Rather than Reliance on Mechanical Appliances

"The vocational reeducation of a man who has suffered the amputation of an arm is much more difficult than that of a man who has lost a leg," writes T. B. Kidner in the *Vocational Summary*. "In point of fact, there are many occupations from which the loss of a leg does not debar a man."

Artificial appliances innumerable have been devised to take the place of the natural member, one type being a close imitation of the natural arm—Sunday arms, some call them; another being merely working appliances, frankly and unmistakably artificial. The efforts of inventors have centered chiefly, it appears, on a device capable of being used as a hook for lifting, with the additional advantage of being able to grip an object, the power of grasping being one of the hand's most used functions. So far, however, no one device that is satisfactory for all purposes has been produced, and special devices for individual occupations will continue to be required and manufactured.

French surgeons and makers of prosthetic apparatus are paying a great deal of attention toward perfecting devices to enable men who have lost an arm to follow agricultural pursuits, as 60 per cent of the French army in the recent war came from the land.

But the best artificial appliances have their limitations, and the present trend in all the Allied countries, where so many thousands have suffered arm amputations, is toward simplicity in artificial appliances.

More and more, military orthopedic surgeons and those engaged in functional reeducation are urging on the men who have suffered arm amputation, the necessity of training the remaining arm, or the stump of the amputated limb, as fully as possible. The training varies from the simple muscular movements to prevent atrophy of the stump, which are undertaken in all reconstruction centers where amputated men are under treatment, to the particular training of a stump or a portion of the hand to perform some definite mechanical operation.

Large numbers of men injured in industry, statistics show, are very adaptable, and become efficient in spite of the loss of some of the members of the body, age in this connection being an important factor. It is certain that this particular phase of functional reeducation will be studied and practiced more and more, both for those injured in the war, and for victims of industrial accidents.

For the time it usually takes a stump to shrink and harden to its final shape, the Surgeon-General of the Army provides the soldier who has lost an arm with a provisional limb. This is replaced by a permanent artificial limb properly fitted to the hardened stump which is furnished by the Bureau of War Risk Insurance. The Federal Board of Vocational Education furnishes any mechanical appliances necessary to enable a man to pursue a course of training, or follow an occupation.

But with even the best appliances that can be procured, many will be disappointed in their use. Therefore, it can not be too strongly impressed upon men suffering the loss of an arm that they should not place too much reliance upon any artificial appliance, but should learn to use, wherever possible, the good hand which is left in order that best results may be accomplished.

DEPARTMENT OF NURSING

Conducted by ANNIE W. GOODRICH, Dean Army School of Nursing and CAROLYN E. GRAY, R.N.

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THE HOSPITAL HEAD NURSE*

The Threefold Responsibility of the Head Nurse—Toward the Hospital, Toward the Training School, and Toward the Community

By SISTER M. DOMITILLA, R.N., Rochester, Minn.

The position of head nurse ranks next in authority and responsibility to that of the superintendent of the training school. Her duties are supervisory, administrative, and educational, and may be summed up as follows: Her duties toward the hospital; her duties toward the training school; and her duties toward the community.

Her first responsibility, that toward the hospital, is more tangible than the others and therefore somewhat easier to meet. She should show the greatest respect for the superior officers of the hospital and the policy of the institution, and never, under any condition, complain of or criticize them to pupils or patients. Her example is far-reaching and her attitude will invariably be copied by those under her. No matter how good a superintendent a hospital may have, or how excellent its staff of doctors and board of trustees, it must have the loyalty of the head nurses before its reputation is secure. Without loyalty there cannot be unity, and without unity good work is impossible.

Another very important duty toward the hospital is that of strict supervision in the ordering and use of supplies. Hospitals do not secure supplies and appliances without cost. Many are very expensive, and nurses, maids, orderlies, attendants, and, I might add, interns, sometimes get the idea that hospital property is unlimited in supply and for public use. It behooves the head nurse to make them understand from the beginning that extravagance and waste will not be tolerated. This does not mean, however, that patients must be deprived of comforts and employees of necessary material. Economy is not taught in that way. What really is necessary is a wise system of checking up that will prevent all unnecessary waste.

The head nurse is responsible for the cleanliness and appearance of her department; therefore, she will need practical knowledge of housekeeping and management of help. She who lacks this knowledge has much to learn, and her work as head nurse will not be successful without it.

The intelligent cooperation of the head nurse is absolutely essential for the success of much of the work done by the physicians and surgeons. She will meet different types of men, and to one and all she must be loyal. Of course, she will have her personal preferences, but these must not be felt by those under her. It is her duty to see that orders are carried out accurately and intelligently, and that everything of importance is reported. She has been in the hospital longer and has had more experience with hospital administration than the interns have; thus she can assist them greatly by keeping in mind the things they might forget or overlook, and by giving them hearty support and cooperation.

The second responsibility of the head nurse, that toward the training school, is not so well defined. The most important duties, however, are those toward the superintendent and those toward the pupil nurse. If she has a vital interest in the problem of teaching and administration, the assistance she can give the superintendent is of greatest value. The reports to her must be carefully prepared, and in them the head nurse must aim at honest and frank statements of the success and failures of her pupils. Without the help that comes from the honest efforts of the head nurses, the superintendent is greatly handicapped in her work. There must be the force of a common sentiment, a common purpose and mutual confidence, before good results can be secured.

The training of the pupil is a grave responsibility of the head nurse. Here is the place where so many fail. This failure is probably due to a lack of knowledge or a lack of sympathy for the work of the training school. Many nurses graduate from the school who might have been better equipped and more efficiently trained, if the head nurses had only realized their duty.

The pupils are responsible to the head nurse for the performance of practical nursing duties. She must, therefore, supervise their work and criticize it when necessary. Herein lies her golden opportunity for effective teaching. She should know what methods and procedures are taught in the class room in order that the same methods and procedures may be carried out in the ward. Great care must be taken to organize and distribute the work of the pupil so that it will contribute most to her education and advancement. Requiring a nurse to take temperatures five or six hours a day for a week or two is not the best method of training. We find this practice, and others as deadening in their effect, in some of our hospitals. The work should be so organized that it will stimulate the interest and arouse the enthusiasm of the pupil.

A system of records for each pupil should be kept by the head nurse, so when the pupil leaves the ward to go to another, she will have an exact statement of the work in which she has had training; and also of any in which she has been found deficient. In this way greater progress could be made by the pupil.

The pupils in the classroom receive instruction in scientific subjects, but these subjects often fail to achieve their purpose because the pupils do not grasp their significance in the practical work. There must be close correlation between theoretical instruction and practical work if we are to get the best results from either. The head nurse is in a position to accomplish much in that direction. She should take opportunities for teaching as they arise. With this in mind she should have the day nurses assemble in the morning to hear the night nurses' report, and take that occasion, not to give vent to anger or impatience, but to draw the pupils' attention to changes in the condition of the patients, point out to them typical or unusual cases, question them regarding symptoms, and treatment of diseases under their observation, and assist them in the application of classroom theory in their great laboratory—the ward.

*Sister Mary Domitilla, the author of this paper, is a student in Teachers College, Columbia University, New York City

The nurses could derive much benefit from the clinics held on the ward if they were given the opportunity of attending them. If there is no clinical teaching done in the hospital, it should be provided for the nurses. There are always some doctors in the hospital who would gladly give their services for this work. The best head nurse I have ever known not only insisted on the nurses' attending clinics, but would, herself, take up their work in the ward in order that they might be present.

As a teacher, the head nurse has supremacy over the instructors and superintendent, for she has the pupils always with her, knows their spirit, ability, and needs, has subject matter and material for illustrative purposes, and has constant opportunities for teaching. She can do more to develop the nurse and improve her profession than any one person or group of persons known. She should quickly recognize unusual ability and trustworthiness, expressing at times her appreciation. Her constant presence with the pupils and her intimate knowledge of their work enables her to be of great service in directing them to the field of work for which they are best fitted.

The moral influence the head nurse exercises over the students is a tremendous power for good or evil, as her standard of honor must affect them, whether they are fully aware of it or not. Her attitude toward the hospital and training school authorities; her observance of rules and regulations; her treatment of the patients, will all be reflected in the pupil nurse. She regulates the atmosphere of the ward and is responsible for the spirit that animates it.

The head nurse's obligation to the community includes her contribution in sending forth an efficient, well-trained body of nurses, and the responsibility for the care of the patients that come under her supervision. It is for the patient that all else exists, and in no other way can a head nurse exert more influence over her pupils than in the example she sets before them in her treatment of the patients. If she treats the patients with kindness, gentleness, and consideration, the nurses will do likewise. On the other hand, if she looks upon the patients as mere "cases" and does not devote herself to the proper care of such cases, but is continually harping on "beds in a straight line," "castors turned in," "covers tucked in tightly," "nothing on the bedside table," etc., she can not expect to turn out nurses possessing the qualities of gentleness, cheerfulness, conscientious service, and devotion. The welfare of her patient must hold first place in her thoughts. She is the person upon whom the patients chiefly depend and to whom they look for sympathy and proper attention, and to whom they appeal when they think they are being neglected. She should inspire them with confidence and respect, for those two requisites are absolutely necessary to the successful head nurse.

She is hostess in the ward and should treat her patients accordingly—giving them a kind, courteous reception, and making them feel comfortable in spite of the trying procedures they often have to experience. The relatives, too, should be given proper consideration so that they will go away the happier for the impressions they have received.

A thorough knowledge of the patients under her care is absolutely necessary in order that the head nurse may plan her work intelligently and economically, and act decisively, and at the proper time. This knowledge should consist of time of patient's entrance into the hospital; nature of the disease; the doctor in charge; treatments given, including medicine, diet, etc., and the changes taking place in the patient's condition. She is responsible for the patient's welfare as long as he remains in the hospital, not only as to his physical but his mental comfort as well. She must not forget the great solace that might be afforded her patients by visits of the ministers of their religion, be they Catholic, Protestant, or Jew. The head nurse represents not her own religious faith, but the true spirit of brotherhood, which aims at the strengthening of all bonds which make for the better life of her patients.

After the enumeration of the manifold duties of a head nurse, one may be inclined to feel that the position is overwhelmingly discouraging, but though much may be said of her duties, more may be said of her opportunities. She sees life on all sides and has all the opportunities of a teacher in her relation with the pupils. She may become student in her relation with physicians and surgeons, and in the application of science to the rich field of the ward. As a social worker, she has abundance of material before her all the time, for all the problems of sociology are found in the hospital. She has the opportunities of the philanthropist, for humanity with its comedy and pathos, its courage and despair, its virtues and vices, is ever present. Her responsibility in the management of her department and the supervision of others give her all the advantages of an executive. Lastly, she has the privilege of the nurse who delights in spending her energies in the alleviation of pain and suffering.

The importance of the position can not be overestimated. But, as we have known it, there has been too much dictation. There has been too much lifeless routine. The work has been too mechanical. We need a greater spirit of democracy, and less of autocracy. For the nurse who has the ability to carry responsibility and direct others, the work is one of continual progress. It stimulates her to her best efforts. It is a definite test for ability and is full of congenial association.

* * * *

A FRANK STATEMENT OF SOME STRIKING NURSING FACTS

Commencement Address at Grady Hospital Contains Many Ideas of Value in Making Nursing Profession More Attractive to Students—Giving the Army Nurse Her Due

As a rule commencement addresses have a good deal of sameness about them, and it is not difficult to recognize old ideas brought up to date and dressed in the prevailing style of the year in which the address is delivered. This makes the presentation of unusual ideas in a commencement address all the more striking, and we congratulate Dr. Frank K. Boland on his address to the graduating class of the nurses' training school of the Grady Hospital, Atlanta, Georgia.

Sandwiched in between the usual congratulations, exhortations, etc., included in the address we find this statement:

"Medicine has advanced more in the past forty years than in all the rest of time combined, and no one factor has contributed more materially to this progress than the development of the *scientific* nurse."

Following so soon after the many attacks on our meager standards it is encouraging to find a man, who, as chief surgeon of Base Hospital No. 43, A.E.F., has presumably had opportunity to evaluate the work of nurses, choosing the adjective, "scientific," to describe the nurse whose contribution to medical progress has been the greatest.

Another paragraph that challenges attention is:

"If you have entered the school with the proper qualifications—and I believe you have—your three years here have prepared you to cope with anything in nursing. But if *we* have given you so much, with a bit of salary added, what have *you given* us? Thirty-six months of strenuous, invaluable toil, a good part of which was *drudgery*. There is no kind of institution of learning in which the student contributes to the school so much of intrinsic worth as in a training school for nurses. So, as the institution gives you your education, you give it a means of existence."

In many parts of this country there is at the present time an acute shortage of applicants to nursing schools, and many women who have given the best part of their lives to the study of the problems of nursing education feel that one of the first steps we must take in order to make the nursing profession more attractive to a larger number is a frank recognition of the facts that Dr. Boland has stated so convincingly. Moreover, they are confident that a recognition of these facts will result in the elimination of much of the "drudgery" exacted of pupil nurses, and the striking of a fairer balance between the amount of work exacted and the amount of education given in payment for that work.

Truly it is stimulating to have a man of vision express sentiments that, from the lips of nursing leaders, would be labeled "radical." It is pleasant to think that this may be a foreshadowing of the "coming together" of the medical and nursing professions which was emphasized in a recent letter published in this magazine.

A third paragraph merits a word of comment:

"There was never a time in the history of nursing when the profession deserved such praise as today, when we review its resplendent record in the Great War. Truly the army nurse has at last come into her own. Her position in the medical department is forever secure. Without the contribution which she made to the medical service in our army we would have been forced to adopt the methods of a century ago. Never before did an army operate with a nursing force of such numbers and of such skill. Our soldiers, our government, and civilization can never discharge their obligation to the Army Nursing Corps for its patriotic, courageous, untiring, triumphant labor."

In answer to this we would like to remind the medical profession, the soldiers, and the government of the United States Army that the enactment of the bill giving relative rank to army nurses, would be one way to translate such sentiments into worth-while action.

* * * *

REPORT OF THE ARMY SCHOOL OF NURSING

Students on Duty in Many Civil Hospitals—Uniform Course of Instruction—Appointment of Miss Stimson as Dean of the School

The first annual report of the Army School of Nursing contains some interesting facts.

It presents a total enrollment of 741 students, 573 on duty in fourteen military hospitals, and 168 in the affiliating civil schools.

The posts at which students are now located are: Camp Dix, U.S.A. General Hospital No. 41 (Fox Hills), Camp Grant, Letterman General Hospital, Fort McPherson, Camp Meade, Fort Sam Houston, Fort Sheridan, Camp Sherman, Camp Taylor, U.S.A. General Hospital No. 1 (New York City), U.S.A. General Hospital No. 3 (Colonia), Camp Upton, and Walter Reed General Hospital. The largest number of students are at Walter Reed, Letterman, Fort Sheridan, Fort McPherson, U.S.A. No. 41 (Fox Hills), and Fort Sam Houston, as these are permanent posts.

The civil hospitals have responded so generously to the requests for opportunities for experience with women and children that the needs of the school have been fully met. Students are on duty in the Columbia Hospital for Women and the Children's Hospital, Washington; Bellevue Hospital, St. Luke's Hospital, and the Post Graduate Hospital, New York City; The Lying-in Hospital and the Children's Memorial Hospital, Chicago; the Johns Hopkins Hospital and the Hospital for the Women of Maryland, Baltimore; the Presbyterian Hospital, the Philadelphia General Hospital and the Children's Hospital, Philadelphia; the University Hospitals, Minneapolis; the Barnes Hospital, St. Louis; and the Boston Floating Hospital. There is every reason to believe that the students are adjusting satisfactorily.

On the closing of Camp Grant Miss Anne Williamson and Miss Elizabeth Melby, who so ably conducted that unit, were transferred to Walter Reed. Miss Marie Louis, who established the first unit at Wadsworth, is now at Letterman. Miss Margaret Wilson, formerly at Lewis, has gone to Fort Sheridan. Miss Catherine Dougherty and Miss Elizabeth Chaffee have been transferred from Custer to Fort McPherson. The other chief nurses remaining at the same posts are Miss Mary Robinson, Mrs. Maude Burke, Miss Mary Land, Miss Grace Baker, Miss Josephine Swenson, and Miss Louise Arnold. Upon the return of Miss Burgess to her post in Albany, July 1, 1919, Mrs. Harriet Barnes was transferred from U.S.A. No. 1 to assist in the Washington office.

The meetings of the National League of Nursing Education recently held in Chicago and attended by thirty-one directors and instructors furnished opportunity for a third conference of the faculty of the Army School. The reports and discussions that followed were of much interest.

The use of the Standard Curriculum has, in the main, made a uniform course of instruction possible, but the variations in the service, the consolidation of the groups of students, and different situations arising in such departments as the reconstruction, social service, and dietary, have led to interesting developments or have handicapped the progress of the students. It is felt that the former have far outweighed the latter, and the unique and varied experience of the majority of the students cannot fail to provide a very broad and effective preparation for the nursing field.

The report records the appointment by the Surgeon-General of Julia Stimson as dean of the School. Miss Stimson holds the master's degree of Vassar College and the diploma of the school of nursing of the New York Hospital, graduating from the latter in 1906. Entering almost immediately the administrative field, she has filled several important positions, the most conspicuous being the superintendency of the training school of Barnes Hospital, Washington University, St. Louis. She was chief of the unit this institution sent overseas. Her service throughout the war as presented in the following citation needs no further comment.

AWARD OF DISTINGUISHED SERVICE MEDAL

Miss Julia C. Stimson—For exceptional meritorious and distinguished services. As chief nurse of Base Hospital No. 21, she displayed marked organizing and administering ability while that unit was on active service with the British forces. Her devotion to duty was exceptional while she was chief nurse for the American Red Cross in France. Upon her appointment as director of nursing service of the American Expeditionary Forces, she performed exacting duties with conspicuous energy and achieved brilliant results. Thousands of sick and wounded were cared for properly through the efficient service she provided.

(Gen. Orders No. 70, War Dept., May 26, 1919.)

Time passes so quickly that it hardly seems a year ago

since the formation of this school was first proposed. Those familiar with training school work can read between the lines of this report a record of brilliant achievement, of difficulties overcome, and of problems satisfactorily solved, all of which will be linked in history with the name of Miss Annie W. Goodrich, to whose statesmanship the existence of the school is due.

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ENDOWMENT FUND FOR SPECIAL NURSES FOR WARD PATIENTS

Lives of Critically Sick Ward Patients Often Jeopardized by Lack of Constant and Skilled Nursing—Presbyterian Hospital Pioneer in the Movement

Permanent endowment funds for special nurses to care for critically sick ward patients are being founded by the Presbyterian Hospital, Chicago. This institution has two endowed nurses of this class: one is known as the Helen B. North nurse, Miss North having contributed $20,000 a few years ago, the interest to be used for this purpose; the Women's Auxiliary has started another $20,000 endowment for the maintenance of a second nurse, to be known as the Gladys Foster Memorial Nurse, in memory of Miss Foster of the class of 1919. The hospital is asking friends of the needy sick to continue this endowment of thoroughly trained nurses.

"Nearly every ward patient who enters a hospital requires especial attention at some critical time," writes Asa S. Bacon, the superintendent of the hospital in the *Presbyterian Hospital Bulletin*, "and many lives are saved through efficient nursing."

Owing to advanced ideas regarding hospital routine, the floor nurse in the average hospital has neither the time nor, in many instances, sufficient training to give the individual patient exclusive attention during the critical period. She must distribute her time among all the patients under her care.

A thoroughly trained nurse for such cases means a wonderful relief, not only to the patient, but to the anxious members of the family. Often, life itself depends on the constant attendance of a graduate nurse during the critical hours of danger.

"Those who contribute to the support of these nurses," says Mr. Bacon, "contribute not only to a permanent endowment, but to a permanent blessing."

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SHORTER HOURS IN HOSPITAL NURSING SCHOOLS ADVOCATED

Educational Committee of National League for Nursing Education Issues Bulletins Giving Reasons for Readjustment

The educational committee of the National League for Nursing Education has recently issued two bulletins on the subject of "Shorter Hours in Hospital Schools of Nursing." In Bulletin number 1, the case for shorter hours is presented under the following sub-topics:

1. Why student nurses should have shorter hours—a summary of the main arguments.
2. How this question affects public health and welfare.
3. The long hours in hospital training schools are mainly responsible for keeping down the supply of good nursing recruits.
4. What are the present conditions of work in the average hospital training school?
5. What evidences exist to show that these conditions injure the health, or reduce the efficiency of the pupil nurse?
6. How have these conditions come about, and why have they continued to the present day?
7. Long hours in hospital training schools are not necessary. The eight-hour day has been fully tried out, and found to be as workable and more satisfactory than the old system.
8. The general movement for protecting the health and increasing the efficiency of workers, is based on sound physiological and economic principles.
9. What are the common objections to the eight-hour day in hospitals, and how can they be met?
10. Conclusion.

Bulletin No. 2 is entitled "Suggestions for Establishing the Eight-Hour Day in Nursing Schools." The sub-topics are:

1. The problem.
2. Number of additional nurses required.
3. How to provide for more nurses.
4. The difficulty of housing more nurses.
5. The use of graduate nurses.
6. The use of ward helpers or attendants.
7. The use of labor-saving methods.
8. Getting the plan started.
9. Suggested schedules of hours.
10. Suggested schedules providing for a forty-eight-hour week.
11. What superintendents of nurses say about the eight-hour system.
12. Recent articles on the organization of the eight-hour day in hospitals.

Both of these bulletins contain information that is invaluable just now, when nursing schools are passing through a critical period of adjustment.

Copies may be secured from the secretary of the committee, Miss I. M. Stewart, Teachers College, Columbia University, New York City. Single copies of Bulletin No. 1, 20 cents; single copies of Bulletin No. 2, 10 cents. A reduction in price will be made for quantities of 100 or over.

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PRESIDENT OF AMERICAN NURSES' ASSOCIATION HONORED

Miss Clara D. Noyes Decorated With Patriotic Service Medal for Services Rendered Her Country and Its Wounded

Miss Clara D. Noyes, president of the American Nurses' Association, and acting director of the department of nursing, American Red Cross, has been decorated "for services of high and inestimable value to her country and its wounded," with the Patriotic Service Medal of the American Social Science Association and the Council of the National Institute of Social Sciences, one of the highest honors to be bestowed for military service.

Miss Noyes, as head of the Red Cross Field Nursing Service had charge of the assignment of the thousands of Red Cross nurses who volunteered for war service. She entered Red Cross work in 1916 as director of the Bureau of Nursing. She is an alumna of Johns Hopkins Training School for Nurses, was superintendent of St. Luke's Hospital and Training School, New Bedford, Mass., and more recently, general superintendent of Bellevue and Allied Hospitals Training Schools, New York. For three years, 1913 to 1916, she was president of the National League of Nursing Education and was for six years president of the board of directors of the *American Journal of Nursing*. Miss Noyes is to be congratulated on this latest recognition of her services.

DEPARTMENT OF DIETETICS

Conducted by LULU GRAVES.

Please address items of news and inquiries regarding Department of Dietetics to the editor of this department, Home Economics Building, Cornell University, Ithaca, N. Y.

TRAINING THE SOCIAL SERVICE DIETITIAN*

Organization of Educational Dietetics Work as a Distinctive Form of Service Rather Than as a Minor Part of Another Department, a Necessity—Actual Practice in Various Kinds of Work, Another Requisite

By EMMA A. WINSLOW, Secretary, Committee on Home Economics, New York Charity Organization Society, and Lecturer, Teachers' College, Columbia University, New York

What is a social dietitian? How does her work differ from that of the institutional dietitian? What modifications in her training are essential in order that her work may attain the high standard of efficiency which is now expected in the work of the trained institutional dietitian?

The term "social service dietitian" has been used to designate various types of work conducted under the auspices of various types of organizations, according to various standards, and with varying results. In this paper I wish to discuss, primarily, the work done by a person well trained in dietetics and other phases of home economics, who is a member of the staff of a health center, a hospital clinic or an out-patient department, and whose responsibility is the educational supervision of individual living at home, with reference to dietary adjustments and to other forms of home-making adjustment commonly recognized as within the field of home economics.

Preferably, it seems to me, such work should be organized as a separate and distinctive phase of health work with the full responsibility for its administration left to the dietitian, and with necessary space and equipment for its operation on an independent basis, rather than as a minor part of the work of another department.

This gives definite recognition to the importance of the educational work being done, and helps to establish its value in the minds of both patients and staff. Also the use of a special room for personal consultations and group conferences makes possible the display of effective illustrative material and otherwise aids in promoting interest in the work and in facilitating its administration. With certain people, demonstrations in the home are more effective than demonstrations at a teaching center; but there is often a distinct advantage in being able to demonstrate at the time of the office consultation the preparation of certain dishes being especially recommended, rather than in being forced to delay all such demonstrations until home visits can be arranged. The success of Miss Joseph in Chicago and Miss Wood in Boston would seem to indicate the advisability of organizing educational dietetics work as a distinctive form of service, and of training women to be qualified to fill positions involving a considerable degree of responsibility.

The food or nutrition clinic under hospital direction reaches the people whose physical condition indicates the need for marked dietary adjustment as an aid in the cure of a diseased condition, or to prevent its development into a more acute form. However, the interest in public health is coming to be increasingly on the preventive side rather than on the remedial side, and I am hoping that the use of the social service dietitian will not be limited to work with patients already diseased, but will be developed also as a recognized part of preventive public health work, with the public health dietitian an important factor in the program as well as the public health nurse, and her services made equally available to all groups in the community in an equally distinctive way.

Altogether too often, in my estimation, has the social service dietitian been content to accept a subordinate position on a staff of people trained and interested along other lines; it seems to me that she should take a more definite stand as qualified by her training to be considered possessed of a certain type of expert knowledge, which she can use for the promotion of health and well-being in a way that cannot be done by a person not so trained. She needs the services of the nurse and the physician and is often helpless without them, especially if there is a diseased condition which requires careful observation and treatment. However, it would seem that she can also make herself serviceable to them because of her special and different training, and that the value of her services should be far more fully recognized as an asset in public health work than is the case at the present time.

Before discussing the training of the dietitian for social service work, let us first consider the difference between her work and that of the institutional dietitian for whom fairly definite training courses have been established:

One of the great differences is that the work of the social service dietitian is primarily educational, while that of the institutional dietitian is primarily administrative.

If John Jones requires a special diet while he is living at home, and he is under the care of a social service dietitian, his special diet is secured by teaching him and his family to appreciate the importance of his following the diet schedule closely, by adjusting the budget, if necessary, so that there will be money available for the purchase of the necessary foods, and by showing the patient or the family how to select, prepare, and serve any unfamiliar foods or food combinations required under the diet plan.

If, on the other hand, John Jones is in a hospital and under the care of the hospital dietitian, her task is quite different. Securing his special diet is a matter of keeping the hospital food department operating efficiently, and of adjusting general diet orders to meet the needs of his individual case, or the needs of a group of cases presenting similar dietetic problems. If his case requires expert dietary adjustment, in some hospitals he may come under the personal care of the dietitian while in the hospital. But usually the dietitian has but little opportunity for educational work with the patients except through the nursing staff, in comparison with the amount of administrative work which she does for them.

Other differences in the work of the two dietitians are with reference to the kinds of information which are essential as the basis for their professional activities. The social service dietitian, if she is to be successful, has to be interested in studying the needs of a particular per-

*Read at the annual meeting of the American Dietetic Association, Cincinnati, Ohio, September 10, 1919.

son or family and developing means of assisting them to make necessary adjustments. Practically the same diet may be required in two diabetic cases, but securing its use may require absolutely different methods and points of emphasis. Each case is a distinctive problem and has to be individualized, not only from a dietetic standpoint but also from a social and an economic standpoint, in a way that is not necessary in the dietetic care of a hospital patient.

In order to buy efficiently for a hospital, its dietitian has to be thoroughly familiar with wholesale markets; she does not need to know the retail market facilities and customs in the neighborhoods from which the hospital patients come. She needs to know every detail of hospital plan and of food and housekeeping equipment; but she does not absolutely need to know about the kinds of houses in which the patients live, the kind of furnishings and equipment they use, the kind of food and clothing they ordinarily have, and the defects in their standards which should be remedied by personal and community effort. Such information is absolutely essential for the social service dietitian, but it would seem to be part of the general rather than of the technical training of the hospital dietitian; of service chiefly in helping her feel the social and educational importance of maintaining high standards in her hospital administration rather than of direct help to her in so doing.

Just what training the social service dietitian should have has not been tested out by practice, as has been the training of the institutional dietitian. What I have to say is therefore based rather largely upon personal opinion rather than ascertained fact. I am open to conviction on most points, however, and should greatly appreciate discussion of the following suggestions concerning the training of the social service dietitian. I am purposely making them in rather definite form so that they may be used more effectively as the basis for discussion, but hope that you will consider them tentative suggestions pending the formulation of definite recommendations which I wish this section might prepare this year or next for the guidance of those interested in training people for this special type of dietitian service.

First of all, as has perhaps been indicated by the earlier part of my paper, I believe that the training of the social service dietitian represents quite a different problem from that of training the dietitian for an institutional position, although certain phases of such training can be desirably utilized in preparing a person to take charge of a food or nutrition clinic under hospital direction. She needs to know hospital methods and organization, the kinds of diet which are used for various types of diseased conditions, and the results secured from the use of these diets. It would seem that actual experience in a hospital diet kitchen would, therefore, give her valuable practice, especially if it could be adapted to meet her own particular requirements instead of being of value chiefly as preparation for institutional work. A person with institutional training and experiences can fairly easily supplement them by suitable training for a social service position, but it seems to me that it is unnecessary to give a person who is planning to try to solve various home-making problems special training in institutional administration beyond the amount necessary to help her to maintain desirable standards in her own work.

As her main contribution to health work will probably be along dietetic lines, she will need thorough training in nutrition and dietetics. Then she will have to have sufficient training in simple methods of food preparation so that she can give food demonstrations easily and quickly; prepare and adapt recipes as necessary; and be constantly ready to suggest various ways in which foods can be prepared to meet differences in personal tastes and in racial or religious customs.

Also, she will wish the family to have food prepared suitably and in a cleanly fashion. This often requires that she give definite and concrete advice about the selection and use of household furnishings and equipment, better housekeeping methods, and various other phases of household management.

If a more expensive type of food has to be purchased, or it seems wise to urge a lower food expenditure in order to have more money available for other uses, a budgetary adjustment is immediately necessary, and the visitor finds that she has to know a considerable amount about the cost of maintaining desirable living standards under local living conditions, the principles and methods of budget planning, and the essential factors in the thrifty use of the income under each of the budget headings.

In addition to a well-rounded home economics training, she needs special training which will help her to succeed in her work as a social service dietitian. And may I say here that I do not think that this term describes adequately the nature of the work which such a person can do? The purpose of the work is primarily educational rather than the making of social investigations and the development of treatment plans as is customary in social service work. The title of "dietitian" has been given recognition and prestige in connection with institutional work, and it seems to me to create confusion when an attempt is made to utilize the title to describe quite a different type of work. Also, the term "dietitian" gives an impression of interest only along food lines. In institutional work such specialization may be possible and desirable; but I think that most people who have had actual experience in family visiting will agree that ability to secure desired dietary adjustments often requires considerable skill in securing other home-making adjustments, and that it is not desirable to limit too closely the apparent range of interest of the visitor. At present I have no substitute for the commonly used title of "social service dietitian," although I am still hoping that some better descriptive term will be evolved in connection with the further development of the work according to new standards and under new auspices.

The ideally trained person of the future, whatever she may be called, will surely need training in the principles and methods of social case work and a certain amount of experience in case-work practice under the direction of a case-working agency. The making of a social investigation and the development of a comprehensive plan of treatment will probably be outside of her particular province in her work with families, but she should have sufficient training in case-work methods to see the importance of certain facts as indicating certain needs in the family situation. Also, she will be working frequently in close cooperation with case-working agencies who are aiming for certain results in particular situations, and acquaintance with their methods and plans will go far toward helping her to secure desired results from her personal services. Case-work training is recognized usually as essential in the training of the public health nurse, and it would seem that it should be considered equally important in the training of the home economics worker.

In addition to her family visiting, the social service dietitian will probably be required to give a certain amount of group instruction and to take a certain amount

of responsibility for developing group organization and group leadership of a type similar to that required in home economics extension work, for which training courses have already been established in several universities.

Also, she will need to be familiar with the types of work done by various types of social agencies as indicated by visits to them and by lectures from leaders in the various fields of social work. As much of her work will usually be done with the people of foreign birth or foreign living standards, it will also be helpful to her to be familiar with the differences in dietary and other home-making practices in families of different racial or national groups. Needless to say, she will need a good foundation of general education, preferably with special emphasis along social and economic lines. Most important of all, it seems to me, is the provision of a considerable amount of practice in actual educational work with families of the type which the worker would be expected later to do. This means that directors of food and nutrition clinics can be of great assistance by providing opportunities for intensive training for students along the lines which have proven so successful in the training of the institutional dietitian. Also, it means that schools and colleges attempting to train home economics students for social work positions may have to assist in promoting the estalbishment of centers where practice work in dietary and other home-making adjustments can be conducted according to the standards which students would be expected to maintain and improve upon in their future work.

I believe strongly that the actual contact with home-making problems made possible by the establishment of such a center would have a marked bearing on improving standards in home economics teaching as well as developing a greater field in public health and other social work for the home economics worker, and that it is the next step in home economics education and home economics social work. It certainly would seem essential to have such a center for use in training students for social work positions in the same way that practice teaching opportunities are recognized as essential in training students for teaching positions.

In New York a plan is already under way for the establishment of a home economics center as soon as funds can be made available for its support during an initial experimental period. A trained home economics woman is to be put in charge of the work of this center, and it is hoped that the center can be developed as a means of service along the following lines:

An information center to which people in the neighborhood will come for advice about various home-making problems.

A place where food and nutrition clinics may be held, and various lectures and demonstrations given.

A family social work agency, to which families can be referred for dietary education and supervision, budget adjustments, clothing advice, and other phases of home economics.

An experimental center with reference to methods of effective home economics work with families, methods of record keeping, etc.

A training center for home economics students, public health nurses, and others interested in receiving special training of the type which can be provided at the center.

In conclusion, may I again urge the importance of developing the work of the social service dietitian as a separate and distinctive form of social work, at least until standards for such work are more fully established than at the present time? And may I again urge the importance of developing in the immediate future adequate training courses for the preparation of workers for this special phase of home economics education? Until the suitably trained worker is available, widespread development of the field is not possible. Those of us who are closely associated with the social work in home economics believe strongly in its future. Should we not be safeguarding this future by endeavoring to set standards with reference to the way in which this work should be organized and the amount and type of training which the worker should have?

* * * *

THE IMPORTANCE OF THE DIETITIAN IN THE TREATMENT OF DISEASE

Dietitian an Absolute Essential to the Modern Hospital—Study of Metabolic Diseases Has Popularized Dietetic Procedure in the Hospital—Lack of Cooperation Between Nursing Staff and Dietitian

By HENRY L. ULRICH, M.D., Chief of Medical Service A, Minneapolis City Hospitals, Minneapolis, Minn.

The addition of a dietitian and her staff is absolutely essential to a modern hospital, whether the hospital be large or small. Just as the study of tuberculosis has popularized "fresh air," out-doors, sleeping porches, and recreation in general, so the study of metabolic diseases, particularly diabetes, has emphasized and popularized dietetic procedure in hospitals and in the occasional private house.

Without adequate dietetic support the internist is absolutely helpless in his treatment of metabolic diseases. I may go further and say that, without dietetic cooperation in the kitchen of a hospital, his diagnostic and prognostic efforts are limited. It is a great comfort to the clinician to be able to order diet of prescribed caloric value to a typhoid patient, a reduced salt intake to a case of nephrosis, a "low protein" to a nephritic, and to add or subtract protein, fat, or sugar in a diabetic regimen. These diets in these diseases cover the variations in any other metabolic study so that to review diet in other syndromes would be superfluous. The Mosenthal test meal is frequently emphasized in this clinic for differentiation of renal as well as cardiac insufficiencies. For a correct carriage of this test a high degree of dietetic as well as nursing skill is essential. I use this as a standard in gauging my impression of a nursing staff of a hospital. Where this test can be successfully carried out the clinician can safely apply any of the nitrogen or chloride balance studies he may wish to pursue with a complete sense of security that accurate food values are being properly delivered. The same sense of security can also be felt in his sugar balance studies. If I had to choose between the installation of a drug department and a dietetic department, I would choose the latter. I say this to emphasize the relative importance of the two in the treatment of medical cases.

One important feature of a dietetic department is often entirely forgotten by the staff, as well as by the executive officers—that is, its economic value in time and money, as it influences the mass diet of a hospital. By mass diet I mean the diet for the help, for the house staff, the "light," "semi-solid," and "full diet" of the wards. In our own clinic the latter are standardized both in food units and heat units so that we can instantly adjust a question of nutrition in any type of case which may come up.

The criticism of the dietetic department I wish to make is its apparent or real aloofness to the general nursing staff. One of the striking facts about nurses that

one gains through contact with them in the ward or private house is their lack of adequate knowledge of dietetics. This relates not only to the simple fundamentals of heat and food units but to the importance of these elements as they relate themselves accurately *by weight* to the problem of the sick room. We are very much in the same position regarding diet and nurses that we are regarding laboratory findings and the interns who do not make these findings. There is a lack of interpretative value, as well as a loss of technical skill on the part of those who do not make the laboratory or dietetic findings on the patients under their care.

This lack of training on the part of the average nurse is seen in the difficulty one has in treating the average ambulatory hypertension, diabetic, or nephritic case. Today, if one wishes to treat a diabetic in his house one must employ a special dietitian. This can be accomplished only in the homes of the very rich. It is a form of luxury in which the less wealthy cannot indulge.

Another phase of this lack of hospital training in dietetics is illustrated by the failure of a nurse to communicate dietetic values to a household in which she may be employed. I may state it conversely. Every nurse should have the elements of food values about her sick room—or, if you please, her daily equipment—so that when she comes into contact with any family her proselyting impulse in the matter of food values and their economics might have a complete momentum. One of my greatest difficulties in discussing diet with a patient is to overcome the prejudice or the shock of having to weigh his or her food. Even though the patient is willing, the family will be opposed. This opposition is based on no preconceived ideas; it is simply startling, entirely too "exact" for kitchen thinking. We have arrived at a popular conception of measuring the baby's milk, but the thought of weighing an adult's food is still repugnant to the popular mind. What an enormous aid to the gigantic efforts on the part of the government to save meats, fats, and sugar, a scale in the kitchen would be! This scale is not to check up the grocer, the butcher, nor the candlestick maker. I would intend it for a standardization of the amount of food for each adult. Based on this standard, purchase and consumption would be most intelligently carried out. Here lies the crux of "Hooverizing."

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THE STATE BOARD REQUIREMENTS IN DIETETICS*

Considerable Variation in Outlines of Material to Be Presented and Time to Be Devoted to Subject—Suggested Revision of Standard Curriculum

By HELEN M. WELLS, Drexel Institute, Philadelphia, Pa.

The various state requirements in dietetics to be taught in hospitals vary considerably and a complete resumé of the most recent information published leaves the impression that it might be a most excellent plan to have the Standard Curriculum as presented by the National Board of Nursing Service revised to some extent and then adopted by the various states. California and Virginia are the only two states, as far as can be ascertained, using the Standard Curriculum. Virginia also states that every training school in the state is giving a course in dietetics in both theory and practice under the direction of a trained dietitian. This seems a most excellent record.

Connecticut has adopted the American Hospital Association plan, and that plan offers dietetics in all three years of training. The number of hours given during each year has been made definite.

The Wisconsin State Board advises the employment of a trained dietitian in every hospital of thirty-six beds or over. The work in dietetics in that state has been very completely outlined in the year book published by the medical examiners. During the first year lessons of two hours each in preliminary food preparation are given for sixteen weeks. During the second year thirty-two hours of theoretical dietetics are presented. Aside from these lessons, four weeks of practical work in the diet kitchen are required. More time is devoted in this state to the subject of dietetics than to any other subject.

Compared with this complete plan of the work in Wisconsin, is Massachusetts, which has not yet completed its outline of work. Until May of this year it was not necessary or possible to formulate a plan there, but one will soon be ready to put into use.

Illinois is working on a two-year plan, and the curriculum is not yet ready. Two months (full day) will be required in the diet kitchens, however. Nebraska states that twenty-four hours is the minimum required for dietetics, but most hospitals give more. Vermont, Texas, Washington, Wyoming, and New Jersey state that both theoretical and practical dietetics are to be taught, but the number of hours devoted to the subject is not mentioned.

Colorado and North Dakota seem to require the maximum number of hours in this subject. Colorado suggests that household economics be a prequisite study for entrance to the training schools. They give some tray service during the first year, thirty-two hours (two-hour period) in dietetics (the application of the principles of nutrition and cooking, which are taken up before entering the training school, to diet in disease), and two months of eight hours per day diet laboratory work.

North Dakota demands sixty hours, but more practical than theoretical lessons are suggested.

Pennsylvania gives three hours daily to trays and serving during the first three weeks of the preliminary course, and one hour daily to the serving of special feeding during the third week. In each of the first and second years, twelve lessons in theory and practice are given, and in the third year, twelve lectures in advanced dietetics are given.

Michigan gives a very similar course—twelve hours of theoretical work in the probationary term, twelve hours of practical work in the first year, and twelve hours of theory in the second year.

Maine offers twenty-four hours of theory and practice in the first year, aside from four hours given in the preliminary term.

Minnesota gives tray service in its preparatory term and twenty-four lessons of two hours each in the first year but devotes only fifteen minutes of each lesson to theory (1917).

Kansas gives eight one-hour lessons in the first year and twelve one-hour lessons in the second year, with one month of diet kitchen practice, while Montana gives thirty-six hours to practical and theoretical lessons and two months in the diet kitchen.

Iowa offers tray service in the preliminary course, twenty hours of dietetics in the first year, and six weeks of practical dietetics in the second year.

Arkansas and Oklahoma give tray service and liquid diets in the preliminary term, twenty-eight hours of theory and practice in the first and second years, and eight hours in food values as advanced work.

*Read before the Second Annual Convention of the American Dietetic Association, Cincinnati, Ohio, Sept. 8-12, 1919.

New York requires twenty-four hours of nutrition and cookery and eight hours of diet in disease—all to be given in the first year.

Maryland's minimum standard is fifteen lessons of two and one-half hours each (theory and practice), but the higher standard is for twelve lectures and eight weeks' practical work.

Louisiana mentions that dietetics, domestic science and "food values" are to be taught for twenty hours in the second year and five hours are to be devoted to applied dietetics in the third year.

Oregon gives tray service and the preparation of liquids in the probationary period, and twelve practical demonstrations of two hours each in the first year. However, it also states that more work than that is being given in nearly all the hospitals. An interesting state to compare with Oregon and its indefiniteness is Indiana, which gives minute details as to the work to be done. Tray service is taught in the first year. During the second year thirty-two hours (of two-hour periods) are given of the application of the principles of nutrition and cooking to diet in disease. A course in domestic science is required for entrance to the training school. These lessons are to be given by a physician or nurse—dietitian, and demonstrations and laboratory work in the hospital laboratory are to be given by a special instructor or hospital dietitian. The charting and observations on the wards of the results of routine and special diets are also required, and the calculations of food requirements and the preparation of menus are suggested. Two months in the diet laboratory (eight-hour day) during the second year are recommended.

This shows that the amount of time given to dietetics varies from fifteen hours, in some states, to sixty hours and over in others—and from no outline of lessons suggested in some states to very definite plans of lessons, including the planning of material to be taught, the method of teaching, and the time devoted to the lessons, as well as the specific period in the course of training when the lessons should be presented. This again brings to our attention the fact that a standardized curriculum might be very beneficial.

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NEWS NOTES OF DIETITIANS

Miss Mary E. Pascoe has returned from overseas and is again with the bureau of Home Economics of the New York Edison Company.

Miss Lena Wright has resigned from the army and will manage the dietary department of the St. Lawrence State Hospital at Ogdensburg, N. Y.

Miss Ardelle Ferguson has resigned from Pottsville Hospital, Pottsville, Pa., to become dietitian at the Butterworth Hospital, Grand Rapids, Mich.

Miss Ruth Brenneman has left Asbury Hospital, Minneapolis, Minn., to accept a position as instructor of Home Economics in the high school at Iron Mountain, Mich.

Miss Hattie Brooks has been appointed dietitian of the Lutheran Hospital just being completed at Falls City, Nebraska. Miss Brooks has been in Falls City during the summer equipping the kitchens, and preparing for the dietary work to be done the coming year.

Miss Maude Perry, formerly dietitian at Michael Reese Hospital, Chicago, returned in August from Neuenahr, Germany, where she has been with Evacuation Hospital No. 26. Miss Perry left Chicago early in the summer of 1918 with Base Hospital No. 14. She was with this hospital in France until last March.

QUERIES AND ANSWERS

Nursing Care of Contagious Diseases

To the Editor of THE MODERN HOSPITAL:

I want the copy of THE MODERN HOSPITAL containing articles on aseptic nursing and nursing care of contagious diseases. I should like information on methods of changing nurses' uniforms, etc., in contagious diseases.

SUPERINTENDENT SMALL HOSPITAL, NEW YORK.

THE MODERN HOSPITAL has published a number of articles covering aseptic nursing and the care of contagious diseases, during the past eighteen months. Our correspondent perhaps refers to the issue of March, 1918, which contained two leading articles on this subject: "Hospitals for Communicable Diseases," by Richard E. Schmidt, F.A.I.A.; and "The Contagious Ward of the Morristown Memorial Hospital," Morristown, N. J., by Dr. S. S. Goldwater in collaboration with Palmer and Hornbostel, the architects; this number also contained an article by Lucile A. Butler and Virginia Rau, of the Nursing Corps, U. S. Navy, on "The Hospital Care of Contagious Diseases."

April, 1918, appeared Dr. Richardson's "Infectious Disease Hospitals," in his series on "Standardization of Hospitals."

"The Municipal Contagious Disease Hospital of the City of Chicago," by Margaret J. Robinson, was published in April of this year.

The series of articles now running in the magazine, by Dr. D. L. Richardson, superintendent of Providence City Hospital, Providence, R. I., began in the April issue with "The Care of Infectious Diseases in Hospitals," "Medical Asepsis in French and English Hospitals," was published in May; the third paper of the series, "Aseptic Nursing in American Hospitals," followed in July; the August number contained "Construction of Isolation Hospitals," and the fifth of the series, "Management of Contagious Disease in Hospitals," appeared in the September magazine.

The July number of THE MODERN HOSPITAL might well be termed an "antiseptic number." Opening with the paper on Sir Joseph Lister, the originator of the movement for antisepsis, this issue contained in addition to Dr. Richardson's article already spoken of: "Present Day Meeting of Surgical Asepsis," by Arthur E. Hertzler, M.D.; "Fighting the Bacteria that Cause Infection," by Frank J. Hall, M.D.; "What Is Meant by Surgical Asepsis?" by A. Nelken, M.D.

United States Public Health Service Issues Warning Against Tuberculosis

Intent on guarding the nation's health, the United States Public Health Service has just published a leaflet, one of its "Keep Well Series," entitled "How to Avoid Tuberculosis." It gives the symptoms briefly and simply: "Slight cough, lasting a month or longer; loss of weight; slight fever in the afternoon, night sweats; bleeding from the lungs."

HEALTH AND MODERN INDUSTRY

Conducted by BARROW B. LYONS
Superintendent Delaware Hospital, Wilmington, Del.

SOME HOSPITAL PROBLEMS OF HEALTH INSURANCE

Hospitals Should Consider Proper Methods of Protecting Themselves—Health Insurance Should Not Be a Charity—Efficiency and Economy to Be Obtained Through Hospital Organization and Group Clinics

Nothing more radical has been introduced into the field of labor legislation recently than the problem of health insurance—certainly, nothing that would so radically affect hospitals and the medical profession.

While health insurance legislation appeals to many of the most powerful and logical minds in the country, practically it has made very little headway, for as yet no state has adopted a health insurance law. Eight states, however, have appointed commissions to investigate the feasibility of health insurance, and several of these have already reported favorably.

In an editorial in the March issue of THE MODERN HOSPITAL, Dr. S. S. Goldwater gave eight reasons why he believed it was fair to assume that the country was moving in the direction of compulsory health insurance. These reasons seemed sound and well-taken, and it is assumed in this discussion that before many years health insurance will be a reality in many states.

It is very necessary for hospitals not only to consider the proper methods to protect themselves under health insurance laws, but also to take the broader viewpoint of considering how the best hospital service can be rendered under health insurance. This is a phase of health insurance legislation which seems to have been almost totally neglected by the framers of the bills proposed in the various legislatures. It has seemed sufficient for them to provide in the bills that medical and hospital attention be provided. They do not seem to have considered ways and means for providing this, nor what type of service they would wish provided for the beneficiaries of the law. The chief object of this paper is to indicate means by which health insurance laws may insure to the highest degree so far as hospital attention is concerned.

It seems that, whenever there is a fund to be disbursed, the greatest controversies arise over the problem of the purposes and manner of the disbursement. Unless the question of the manner in which health insurance funds are to be disbursed is carefully thought out before health insurance laws are framed, it is reasonable to expect that many difficult controversies will arise over the distribution of these funds, just as they have arisen over the distribution of workingmen's compensation funds.

To hospitals a question of prime importance is: What is a fair basis of hospital charges allowable under a health insurance act? Workmen's compensation laws went into effect in most states without the interests of hospitals having been fairly considered. As a result, the hospitalization of compensation cases is not sufficiently provided for except in a very few of the workmen's compensation acts. In Delaware, for instance, up to even March 20 of this year, the law provided for the payment of medical services for the first two weeks only, not to exceed $25 in total amount. Now the time limit has not been increased but the maximum amount of allowable charges has been increased to $75—still an inadequate sum.

While this law is an extreme example of the fact that inadequate payment for medical services was allowed under workmen's compensation acts, only a very few states have provided for the full payment of medical, hospital, and nursing services for injured employees. As a result, hospitals in almost all parts of the country have been forced to use funds donated for charitable purposes in caring for cases coming under the workmen's compensation act, and, in many instances, the surgeons have been without compensation for caring for this type of work. This does not seem fair to the hospital or to the surgeon. The theory of the act is that the industry should bear the burden of the expense of the injury. In practice, however, this falls far short of being true. Nevertheless, it seems only fair to hospitals that the laws should align more closely to their theories by providing for paying for hospital treatment upon a cost basis.

There is no reason why health insurance funds, when administered upon a business basis, should not pay hospitals for the cost of the services which they render, including the furnishing of capital to provide adequate facilities. Health insurance should not be a charity. The object of the law is to escape the necessity of charity for the workingman and to provide adequate medical attention for him out of a fund to which himself, his employer, and the state are equal contributors.

Of course, health insurance should not be a profit-making business; therefore, it must be self-sustaining. While health insurance laws have considered the compensation to the physician, they have not amply considered the compensation to the hospital.

If insurance funds are to be distributed to hospitals upon a basis of cost, however, it would be necessary that a uniform system of accounting in hospitals be effected in order that all hospitals might be dealt with on an equal basis. This would necessitate a state auditor of hospital accounts and the submission of periodical financial reports by all hospitals paid for services out of the health insurance fund. There is no doubt that the adoption of a uniform system of accounting in hospitals would bring to light conditions in hospitals about which the general public at present knows nothing.

One of the first questions to which this gives rise is that of the type of service rendered. Should the state insurance funds pay for a very low grade of service upon the same basis that it pays for a very high grade of service, even though the cost of the poorer service may be equal to that of the better? If not, standards of service in hospitals should be established which the hospitals would have to render in order to care for cases under the health insurance act.

Those in charge of administering health insurance funds are bound to see that the money they expend is efficiently disbursed. This means that under health insurance it is probable that the state will establish a very much more rigid supervision of hospital service than has heretofore been the case. This supervision would also furnish a basis for the distribution of charitable funds, although under health insurance charity would be to a

large extent eliminated. Undoubtedly such a supervision would bring about a great awakening as to the disparity in the kind of service rendered in various hospitals, and would also bring about a greater public recognition of what constitutes desirable standards of hospital organization. The ignorance of those responsible for the management of hospitals—to say nothing of the general public—of what constitutes good hospital medical organization, is apalling, even to those who well understand what conditions are.

It seems probable that hospital standardization under health insurance would work a very great hardship upon the non-hospital medical man. If efficiency records on the work of medical men in hospitals are demanded, similar records will also be demanded of men outside of hospital organizations treating patients under health insurance. It will be irksome and difficult, as it has proved in England, for the average practitioner to keep such efficiency records. Hospitals and group clinics will be better able to conform to the standards requiring efficiency records than men in private practice, because the clerical work can be economically attended to by clerks employed especially for this purpose. Hospitals and group clinics for the most part will also be able to render a higher type of service, because of the economy with which a hospital or group clinic can purchase the expensive and extensive apparatus required for the most up-to-date treatment and because of the stimulating effect of group practice.

The fact that greater efficiency and economy can be obtained through organization in hospitals and group clinics will mean that such organizations will gradually acquire more and more of the practice under any system of supervision which health insurance would require. Moreover, the efficiency tests demanded by those responsible for the distribution of health insurance funds would cause many physicians to be barred from hospital practice who are now permitted hospital privileges.

The question as to whether or not a patient should have free choice of his physician would lead to another very difficult complication. If a physician cannot take the patient who has chosen him to a hospital, he is often reluctant to refer the patient to a hospital—particularly in border-line cases, where the need of hospital care is not very pronounced. This, of course, would not be for the best interests of the patient who happens to select a man not on the staff of a hospital. The medical profession strongly protests, however, that it is to the interest of the patient that he be allowed a choice of his physician, and, if the public insists upon this principal some hospital must be open to every physician. This would mean the establishment of open hospitals in every community. In small communities where there is one staff hospital and no open hospitals it would mean either making this institution an open hospital or establishing another. To establish another often would be inexpedient, and to cause the board of trustees of the existing hospital to abolish the staff system would often be impossible. Neither would it seem good economy to build new hospitals when, by adding to existing institutions, adequate facilities could be provided at a very much less cost.

Whether or not, under these circumstances, patients should be permitted to choose their own physicians when hospital care is necessary is a question for very serious consideration. The hospital, like other corporations, is, in the eyes of the law, and in many of its relations to the public, a person.

The service rendered in a hospital can usually be rated as good, bad, or indifferent, just as the services of a private practitioner might be rated if there were any reliable means of appraising them. It seems more proper that the individual, when hospital care is necessary, should be permitted to choose the hospital rather than the person who is to treat him in that hospital.

In a hospital which conformed to the standards adopted by a state insurance fund, the patient would be assured reasonably expert and reliable attention.

The question of establishing schedules of fees for medical services inside and outside of hospitals has proved a particularly difficult stumbling-block in the framing of health insurance legislation, abroad and at home. If schedules were adopted and the patient were permitted the choice of his physician, how could the physician obtain more than the scheduled fee from the patient who could well afford to pay more? In this respect, it is suggested that schedules in hospitals should apply to ward service only and that, when a patient wishes a more expensive service than that provided for ward patients, the doctor should be permitted to charge whatever fee he saw fit, as at present.

Where the interests of hospitals are so greatly involved it would seem only fair that a representative of those interests be placed upon the commission administering the health insurance fund. Provision for this should be made in the law. Hospitals would also find it to their advantage to organize extralegally for the purpose of framing and securing favorable legislation. State and city hospital associations furnish the basis for such organization.

There is a very important phase of the question which at least for the time being, might make it impossible to secure a broad application of health insurance—that is, the present shortage of nurses. As it is, hospitals in almost every part of the country are finding it difficult to secure the necessary number of nurses to man their training schools. If health insurance were to increase gradually the demand for hospital beds, where would the necessary nursing force be found? The nursing profession would have to be made more attractive than it has ever been before, and many requirements which are now being pressed by the National League of Nursing Education and the American Nurses' Association would have to be resorted to at once. Even then it is not certain that the necessary number of nurses could be found. The provisions for making the nursing profession more attractive, such as better nurses' homes, shorter hours for student nurses, and more completely supervised training schools, would cost large amounts of money, but the cost of inducing a greater number of nurses to take up the profession would be as nothing compared to the costs of providing the necessary hospital facilities.

The secretary of the Associated Merchants and Manfacturers of New York State estimates that a health insurance law passed in New York state would require the expenditure of one hundred million dollars more solely for hospitals to equip the state for rendering the proper service. Whether or not this estimate is correct I have no idea whatever, but at least it suggests that the cost of making the laws effective should be carefully investigated before any health insurance laws are passed.

It might be better if the cost were extremely high, to begin by providing facilities for caring for the workers in the most hazardous industries and gradually to extend the facilities for other classes of industry as it became financially possible to do so.

In this discussion I have but briefly suggested some

problems which might be greatly elaborated upon; space does not permit me to do so in this article. I have attempted to suggest the need of an early consideration of health insurance problems by hospital executives. I shall greatly appreciate receiving for this department of THE MODERN HOSPITAL discussions which any readers of this article may find time to prepare.

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A WELFARE WORK THAT SPARES NO EXPENSE

Health and Pleasant Working Conditions Considered a Real Basis of Efficiency—Employees' Dining Room Provides Good Food and Excellent Service at Nominal Cost

By ROSE C. ARMSTRONG, R.N., Chicago

The more one studies the methods of modern business management the more one discovers that the question of health and pleasant working conditions among employees is a real basis of efficiency. For this reason, about seven years ago the Peoples Gas Light and Coke Company decided to establish a department to look after its human machinery in a scientific way.

At present the welfare work covers various features. Sick employees are called upon by the company's visiting nurse. Nursing care is given, whenever needed, as well as advice that may in any way prove helpful. On all of these cases, visited daily, reports are made to the welfare department.

Salaries and wages are paid to sick employees while off duty. No definite length of service is required as long as the employee's record is good. If an employee dies, death benefits are paid to the relatives and, when desired, these funds invested wisely for them. All these expenses are paid wholly by the company and charged to operating expenses. It is one of the few companies who do not carry benefit insurance and deduct a certain amount from the pay envelope. It is truly gratuitous.

Money is lent to employees without interest and repaid in monthly installments. This discourages visits to loan sharks. The company has a splendid pension system that provides for old age, in appreciation of the loyalty and the faithful service of its employees.

The best feature of its welfare work, to my thinking, is the provision of good food at nominal cost. All earning over $40 per month pay 25 cents, and all who earn under that amount pay 15 cents per meal. The general office building has a most inviting dining room, where an average of 700 persons are daily served with a noon meal consisting of soup, meat, vegetables, salad, dessert and beverages. The meals are served by waitresses and the monogrammed linen, china, and silverware all play their part in developing one's appetite. What could be better from a health point of view than to have a substantial hot meal served in this manner?

Because of "help" conditions, the company recently considered operating the dining room cafeteria style, but the officials, wise men as they are, know human nature and feared that the employees would economize on food. This is especially true of the girls, who will as a rule choose something cheap and unwholesome in food to add to their savings to buy pretty ribbons, stockings, and flubdubs. As a result, the dining room system remained unchanged.

The kitchen is the last word in equipment, convenience, and cleanliness. The money taken in for this noon meal does not begin to cover the expenses of operating the dining room and kitchen; so the company pays the differences.

Aside from the dining room feature, there are for the women three rest rooms, supervised by matrons, For the men, there are shower baths and a lounging room. Think of it! Each man can go and take his smoke and play checkers during his lunch hour.

The company also has a very complete library, of about three thousand volumes, mostly technical and educational. The library is in charge of a librarian, and, if, at any time during the day, the nature of business necessitates a visit to the library to look up some information, the employee is at liberty to do so.

The Advance Club looks after the social activities of the employees. This includes recreation, athletics, amusements, entertainments and dancing. The monthly membership dues are 15 cents for the women and 25 cents for the men. The club issues a well edited semi-monthly magazine, with contributions from all of the departments. All this goes to establish good fellowship and camaraderie.

The medical department in connection with the welfare work occupies the same offices and works closely with it. The scope of the work of the medical staff is as follows: (1) medical examinations; (2) general supervision of health; (3) educational; and (4) safety first.

In this operating room every precaution is taken to have perfect asepsis.

The company has a completely fitted operating room, where injuries are dressed. Every precaution is taken to have perfect asepsis. All dressings and instruments are sterilized, even for the most minor injury. Professional people realize that it is the simple scratch which often ends disastrously unless the proper care be given. Instructions are given at the different shops and stations in "first aid" work. A "first aid" cabinet is provided at each of these places supplied with sterile dressings and solutions prepared by the nurse at the main office. They are also inspected monthly and supplies replaced whenever necessary.

"First aid" is simply to protect an injury from further injury or infection and not to treat it. So all injuries are sent to the doctors at the main office. If the injury is a severe one, the patient is sent directly to the hospital, where the company's staff surgeon attends to the case.

The examination of the applicant for employment is to determine the physical and, in a general measure, the mental condition of the applicant. A thorough examination is made, as complete as that for life insurance. This may seem unnecessary, but it is fair both to the employee and the employer. The employee who has been ill is examined before resuming work and, in case of prolonged

illness, when the employee so desires, the company doctor consults with the attending physician.

Health talks are given to the employees at the shop and stations by the chief medical advisor.

From this it will be seen that the company has spared no expense in securing to its employees the maximum benefits that modern science can give in safeguarding their physical welfare and adding to their personal comfort. As a result, the company enjoys the comfortable asset of contented employees.

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PROSPECTUS FOR WORKINGMEN'S HOSPITAL

New Type of Hospital Suggested in Which Working Class Would Have Chief Voice in Management—Welfare of Working Man Primary Interest

The following prospectus for a workingmen's hospital has come to the hands of the editor of this department.

The plan has never been presented to the working people of New York City and very likely never will be. It is interesting, however, in that it suggests a new type of hospital in which the working class rather than the employing class would have a chief voice in the management.

It is the expression of a feeling which working people have often entertained—that is, that they do not wish to accept the charity of their employers; that they believe the workingman does not always receive the highest type of service in charitable institutions; and that it is desirable that hospitals be established which are controlled and have as their primary interest the welfare of the workingman.

Whether or not these assumptions are correct the editor of this department does not attempt to suggest. He merely publishes the prospectus as it was handed to him.

The Workingmen's Hospital

OBJECTS

To bring the best medical and surgical service within the reach of the workingman by maintaining a highly paid staff of the best medical men obtainable, giving the greatest part of their time to the work of the hospital, and rendering the highest grade of service at a moderate cost.

To abolish the dependence of the worker or members of his family upon charity or part-charity provided out of the money acquired by many employers who take advantage of the oppressive and unfair practices usually necessary to obtain success in a large degree under the present industrial system.

To make possible research in occupational diseases in New York industries carried on by eminent scientists working in the interests of the workingman rather than the employer.

To cooperate in creating healthier working conditions with such employers as are desirous of giving their employees a square deal.

FINANCING

Building and grounds to be purchased by funds raised through a general campaign among the working people of New York City, asking each worker in the city to contribute $1. Would aim to secure $1,000,000 as first cost.

Current expenses to be met partially through the sale of health insurance policies insuring full medical and surgical attention in the hospital, and designed to cover the probable cost of caring for the policyholders.

To persons not holding policies charges would be made according to the ability of the person to pay. Health insurance law would provide charges in many cases.

In handling industrial accident cases the surgeon's fee would accrue to the hospital. Particularly attractive contracts might be made with insurance companies to cover the charges for treating employees of their insured.

To support the charitable and research work each working man and woman in New York City would be asked to become an annual member of the Workingmen's Hospital Association by contributing $1 each year, which would entitle the member to a voice in the selection of members of the board of directors. Dues for children, 50 cents a year.

CONTROL OF HOSPITAL POLICIES

The board of directors would consist of one hospital executive, one physician or surgeon not a hospital executive, and one layman.

These men would be chosen by a committee on appointments consisting of one delegate from each labor union in New York City, and one delegate chosen by non-union members of the association. The annual members in each union would select the delegate from their union.

A provisional board of directors could be self-appointed, and incorporate the Workingmen's Hospital Association, and act as directors until the committee on appointments is chosen by the various unions in the city.

SUGGESTED PROVISIONAL DIRECTORS

Under this heading three names appear, which are not published, as they were given without the consent or knowledge of the persons mentioned. The first name mentioned was one of the most successful hospital executives in this country; the second was that of a physician who has become eminent in the practice of industrial medicine; and the third was that of a lawyer who has achieved international prominence as a defender of the cause of the working people.

Tents Made Satisfactory Hospitals

The use of tents as hospitals in France proved entirely satisfactory. The Forty-second and Seventy-seventh Divisions each had nine; at the Steeple Chase grounds at Auteuil, the American Red Cross located thirty-nine to be used as wards. These had wooden frames and floors, ventilation being furnished by means of eighteen windows. When the armistice was signed, the Red Cross was making preparations to establish a tent hospital consisting of 111 tents.

Suffering in Balkan States Alleviated by American Red Cross

Improvement in conditions, resulting from the work of Americans who have distributed medicines, food, and clothing among the starving and naked of the Balkan states, is reported by Lieut.-Col. Henry W. Anderson of Richmond, Va., director of the work of the Red Cross in that part of Europe. Hospitals on the Danube without bed-clothing or drugs were cleaned, and kitchens were established.

Just an Orange

"Sick soldiers are not unlike sick children," a returning Red Cross nurse says; "gratifying their little whims, and giving little personal attention, does a great deal to put a man on the road to recovery. I know of one case where a juicy orange saved a life." Every effort was made by the Red Cross to supply this healthful fruit to "flu" and pneumonia patients, when they were not obtainable through regular channels.

OCCUPATIONAL THERAPY, VOCATIONAL RE-EDUCATION AND INDUSTRIAL REHABILITATION

Conducted by DOUGLAS C. McMURTRIE, *Director Red Cross Institute for Crippled and Disabled Men* and ELIZABETH G. UPHAM, *Advisor in Occupational Therapy, Milwaukee-Downer College.*

RETRAINING THE DEAF

The Deaf Man's Psychological Handicap—Lip Reading Essential for Normal Life and Efficient Work

By ELIZABETH G. UPHAM, Adviser in Occupational Therapy, Milwaukee-Downer College, Milwaukee

The tribulations of deafness are not so much physical as psychological. In actual practice, it is not so difficult for a deaf man to get a job as for one with a more obvious handicap. In its nature, deafness is not so calculated to inspire sympathy as impatience. Thus the real danger is in the afflicted man's taking an industrial position at random, without consideration and without adequate preparation, for in a deplorable majority of cases the deaf workman comes to be scorned, shunned, and ridiculed, and in consequence grows suspicious, irritable, and complaining.

Because of the war necessity it has been very easy for the deaf to secure temporary employment, and consequently there is unusual necessity for urging them to remember how soon their place will be filled by normal workers and persuading them of the importance of preparing themselves to meet these applicants on equal terms. Unless the deaf learn to communicate intelligently with their fellow workers and understand easily and promptly the orders of their superiors, the unhandicapped worker will be preferred to them without exception.

The employment of the deaf, moreover, is not the only thing that is influenced by their ability to understand. Perhaps it is not generally realized that deafness is the most utterly isolating, depressing, and degenerating of disabilities. The blinded man, taken from the light and color of life, is a more pathetic figure, and there is not a man whose hand does not reach out to him in help and sympathy. But the deaf man is a trial to himself and to the world. He has the appearance of stupidity rather than helplessness. It takes a magnanimous spirit in a normal person to overcome the irritation naturally caused by not being understood, and it requires an infinite courage and forbearance on the part of a deaf man to refrain from morbidness, resentment, and suspicion. For it is unbelievably hard for the average man to conceive of the appalling isolation of silence. While the blinded man makes a new world for himself of delicate touch, exquisite sensibility to sound, and wonderful sureness and skill, the deaf man walks in his old world quite alone, with every human relationship forever chilled and numbed in silence.

Communication is the one thing that can restore him to normal contacts. For this reason, lip reading is the immediate necessity and salvation for every deaf man who is to maintain a wholesome place in the world of industry.

The teaching of it is a matter of individual consideration. As a rule, the deaf learn more readily from a teacher who is himself deaf. The war experiments in retraining the deaf have brought out several interesting discussions. Major Dundas Grant reported to the Inter-Allied Conference on the After Care of Disabled Men that in England a three months' course had been found adequate to teach lip reading to the British soldiers. It was brought out that it takes less time to teach the subject in France, and more in Germany. Anyone familiar with the three languages will easily recognize that the reason for the difference lies in the three degrees of articulation—very definite and clear in French, almost entirely with the lips and teeth; more negligent in English, with a tendency to "swallow the words"; and notoriously throaty in German.

Another peculiarity of speech reading is the fact that a hearing person cannot learn it. They have used it in England to help discover cases of simulated deafness, for even teachers of lip-reading, unless they are deaf themselves, cannot lip read to any great extent. It was remarked that in the Lancashire cotton factories nearly every girl could lip read, but their ability to do so arose from their being temporarily deafened by the extreme noise in the factories.

Industry is a much more considerable source of chronic deafness than war itself. Even including the cases of temporary or functional deafness caused by shell shock, which do not involve actual organic injury to the ear, the number of soldiers deafened in this war is quite small compared with the numbers suffering from other disabilities. But there is a wide variety of industrial conditions contributing to deafness. Dr. Gilman Thompson, in "The Occupational Diseases," summarizes the industries particularly hazardous to the hearing. The "dusty trades"—jute, rope or cordage industries, baking, milling, coal-heaving, cement making, etc., cause more or less serious obstructions in the outer ear. Then the explosives used in mining and quarrying are likely to break the ear drum. A similar danger is run by caisson men, divers, and tunnel workers, who are subject to sudden changes of air pressure. The injurious fumes incident to some processes often affect the middle ear. High-pitched continuous noises like spinning, or those heard by railway engineers or telegraphers, and the reverberating noise of riveting inside a boiler may cause labyrinthine deafness.

With all these hazards, it is easy to realize what an extensive problem our industrially employed deaf must be. Employed without training, they are not only liable to discomfort and unpopularity, but are a source of risk in many cases because of their inability to understand commands. They are as doubtful an asset as the unlettered foreigner who has no knowledge of English, but with obliging emphasis replies, "Yah, yah!" to all orders, whether he understands them or not.

From two points of view, then, the deaf have a great need for the knowledge of lip-reading, and should be persuaded to learn it at all costs. It fits the victim again for an independent, useful career in industry, and in many ways reestablishes an intimate connection with normal, human life.

Circumstances, however difficult, are always—without exception—opportunities and not limitations.—Annie Payson Call.

PREPARATION OF HANDICAPPED LABOR FOR ABSORPTION INTO INDUSTRY

Occupational Direction, Training, Placement, and Follow-up Work Important Factors—Previous Experience Should Be Utilized—Permanency, End to Be Desired

"The absorption of handicapped labor into normal industry is attended with grave perils. Positions for disabled soldiers must be found. To add another handicapped group, the disabled in industry, is seemingly to complicate an already intricate problem," says Elizabeth G. Upham in an article on this topic in the *Vocational Summary*. "The labor turnover among normal workers is at best costly and difficult. A labor turnover of handicapped men is impossible, because they have to be specially fitted to their positions, and frequently require special adjustment and supervision in the first days of employment."

Handicapped work is practical from the employers' standpoint providing it is standard and permanent. The permanency is dependent on four factors: Occupational direction, training, placement and follow-up work.

Occupational direction begins in the hospital, and continues into the curative workshop or hospital school. In this connection, temperament, natural interests, intelligence, education, habits of work and vocational desire for the future are all studied, and every effort is made to uncover latent ability. The industrial possibilities of the man must be determined by the vocational director and the doctor.

The direction must be along the lines of former occupation where the man's previous experience will be a benefit, in case he is unable to return to his old occupation. The nature of his handicap and the necessity for utilizing his intelligence and the sound members of his body are also determining factors.

Permanency also depends on his being directed into skilled occupations as far as possible—those which are standard, growing, least crowded, not casual or seasonal, but which furnish steady employment. The handicap of advancing years with the consequent effect on the worker's health or aggravation of his disability must be considered in connection with his efficiency in certain occupations.

Training enables a man to carry on in spite of his handicap. The greater a man's intelligence and skill, the less of a handicap his physical disability proves. Because he is usually displaced when there is a labor shortage unless he is the equal or the superior of the normal man is an economic reason why the government should give him the additional training which will mean permanency after placement.

Training should develop skill and intelligence, and, when possible, should be so thorough that the man's economic independence is secured. It may uncover latent bents which will make it possible to prepare him for work for which he is especially fitted.

In placement, the factors to be considered are: The suitability of the training for and the future of the occupation, wages, environment, danger of industrial disease, possibility of special appliances, and the assurance that any prosthetic apparatus used is fitted for his particular work.

Follow-up work should not destroy the man's sense of responsibility and independence in his home, nor should it interfere with factory management. A report from the employer as to the man's ability, and a conference with the man relative to his health, will furnish the necessary knowledge.

A COURSE IN AGRICULTURE FOR HOSPITAL PATIENTS

Handicapped Soldiers at Camp Sherman, Ohio, Being Interested in The "Back to The Farm" Movement—Correspondence Courses Given to Those in Bed

Base Hospital, Camp Sherman, Ohio, is the nucleus around which centers activities which tend toward increasing the number of agriculturists in the United States. An effort is being made to influence every man who enters the hospital and who will not be permanently disabled to return to the farm, if he was once a farmer. The interest has spread until men who have been engaged in lines other than farming are becoming interested in that pursuit. Many boys have also enrolled in the agricultural division in order to be able to take advantage of the plan to place soldiers and sailors on government land, provided it materializes.

Instruction begins while the patient is still in bed, the regular Ohio State University Agricultural correspondence courses being given. As soon as one lesson is completed, the student answers a number of questions, and is graded before taking up the next lesson. "Among the popular courses are stock raising, alfalfa and potato culture, poultry husbandry, vegetable gardening, orcharding and bee-keeping," says Carl W. Shiffler, chief of agricultural division, educational department, of the base hospital, in an article in *Carry On*. "Rope-splicing and knot-tying, germination tests and farm accounting work are also offered to bed patients."

As soon as a man is able to leave his ward, he attends the regular class work which consists of lectures and laboratory work. If able to do outside work, he assists in the planting and care of shrubbery, arranging flower beds, and in garden and field work.

The best farms in the community are visited with the instructor, and an opportunity to study successful farming at first hand is given. The department has control of a considerable amount of modern farm machinery, including a tractor, so that practical methods can be demonstrated. There is no lack of students who can be used in helping instruct others.

An excellent farm library and reading room, where all the Middle West farm papers may be found, is one of the important features.

The results of this training have been so satisfactory that medical officers are positive that the work has materially hastened the cure of the men; and the men are gaining a practical course of instruction which will enable them to succeed in spite of their handicaps.

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"CHEER UP, BUD, YOU CAN DO THE SAME"

Men in Training Send Encouraging Words to Disabled Comrades—Receive Education They Missed as Children—Confident of Future

Months in bed in a base hospital and more months spent in convalescing sometimes saps the courage of a young fellow; but there are numbers of our boys showing the same amount of pluck in their fight against discouragement as they displayed "over there." Here is what one of them writes:

"Those of you who are in bed or in a convalescent camp, that are down-hearted because of some sickness or injury, are in the same fix that I was in and am partly in yet, and I would like to say that this discouraged feeling is useless, because, if you will, you can make a better man now out of yourself than you were before you entered the service.

"Uncle Sam has a great thing for you, just like he gave me, and that is an education in any line whatsoever; he will pay you for going, all expenses in the line of supplies for this education and take care of you in general until such time as you are able to stand on an equal footing with any man in the line of trade you adopt.

"Now, fellows, get that question off your mind, and get well quick, but keep the same courage you had when the order came for you to go over the top, and you can go over again, but this time to prosperity and independence, even though you are crippled for life.

"Just write to the Federal Board for Vocational Education at Washington, D. C., and tell them your troubles; they will be glad to look after you. The American Red Cross will also help you in any way it can to get started on this golden opportunity.

"I am taking a course in traffic. I started in the business school on January 16, 1919, finishing my course with a good grade in forty-two days. I am now at the university in a higher course of studies. I am very proud of this record, as I had never finished a grammar school when I entered the school.

"Now, cheer up, Bud, you can do the same; tell the Red Cross or write to the board and you will be surprised as to what is in store for you."

Another boy with heart weakened by the strain through which he has passed has completed an elementary commercial course and is now studying accounting and business administration at a university in the West. The two years' work ahead of him seems short as he looks forward to a bright future. This is the message he sends to other wounded or sick soldiers, sailors or marines:

"The thought that I want to leave with you is this: The Federal Board for Vocational Education is back here waiting for you to get well enough to do your part; they are ready to give you the training you need in the line of work you like best. Cheer up! There are fine things in store for you here at home."

* * * *

A WORKING PROSTHESIS FOR THE MAN WITH A USELESS HAND

Appliances to Overcome the Most Difficult of All Handicaps—Devices Invented at the Artificial Limb Center, Lyons, France

When the life has gone out of a man's hand or arm through a cut nerve or other injury causing paralysis, he is often more seriously handicapped for work than if he had lost his arm. He can use neither the lifeless hand nor the working appliances which have been devised to replace an arm that has been amputated. In France peasant soldiers whose wounds have resulted in a paralyzed hand or arm have been found especially difficult subjects to return to the land. They were in fact considered incapable of farm work until a special prosthesis was invented for them at the artificial limb equipment center at Lyons. This appliance is described by Drs. Nové-Josserand and Chatin, physicians at the equipment center, in an article in the *Revue Interalliée pour l'Étude des Questions intéressant les Mutilés de la Guerre*, for September, 1918.

It consists of a corset of molded leather closely fitted to the foream and extending from about two inches below the elbow to the metacarpal knuckles. On the upper side it is laced together; on the lower it is reinforced by a steel bar, which at the heel of the hand is expanded to contain a threaded socket at an angle of 45 degrees to the axis of the arm. Beyond the socket the bar is flattened and widened to support the palm of the hand.

Any toolholder or chuck can be screwed into the socket, but at Lyons one of those invented by Jullien for agricultural work is supplied with the appliance. The combination, according to the authors of the article, enables the peasants of the region to do all kinds of agricultural work satisfactorily. For sharpening a scythe and other mechanical work, the agricultural tool-holder can be replaced by strong pincers. If the injury to the arm has resulted in a clenched hand or bent wrist, there is more difficulty in using the apparatus, but the authors state that different ways have been discovered for overcoming even these obstacles.

About five hundred of these apparatus have been given out at the Lyons equipment center.

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ONE-ARMED SOLDIER BECOMES ELECTRICIAN

Uncle Sam Helps Soldiers To Carry Out Life Ambition in Spite of Handicaps

Some men choose their vocations when they are about the age of three years. You've seen a kid, who when he was almost too small to reach the table would try to amputate the cat's leg or perform an appendix operation on sister's doll. All the family would stand around admiring and choose the medical college he was going to attend when he had reached his manhood years.

Well, here's one who wasn't much more than snaggle-toothed when he was wiring the house and putting batteries on all the doors. When he had finished the sixth grade (without honor) father said one night that the only thing for Joe to do was to get into an electric shop, and earn his own living. Perhaps, there never was a much more perfect moment in that boy's life than when he started down on Monday morning with a tin pail and a pair of overalls.

From twelve years to twenty-eight years means a passage of time, but Joe was still with the company as a cable-splicer. Advancement was there, and he used to look pretty longingly at jobs higher up, but a sixth-grade graduation is not much of a foundation for promotion, is it?

That was just before the United States Army packed up and went abroad for a year or so. Joe went with them, and left star in the electric company's flag.

One day over there a German machine gun carried away the bottom part of a ledge he was standing on, and with it his right hand and the fingers on his left. Visions of the presidency of the electric company vanished into thin air. Of course, the War Risk Insurance Bureau gave him some compensation, but nothing compensates for changing your stand in the world for a seat on the shelf. About that time he got the big news of the surprise which was in store for him.

The Federal Board for Vocational Education sent one of their men to tell Joe that he wasn't ready to quit and the United States wasn't ready for him to, and offered him a year or so off from work in which he could place a few more stones in that sixth grade foundation. Did he take the opportunity? Well, yes. Just listen to this. Joe entered a technical school and is learning to write a readable hand with that left stump, is taking English, mathematics, accounting and salesmanship, and the reports of him are A-1.

When he gets through he is going to be a salesman in that electric company he grew up with, and is going to make more money than he ever did before, with a good chance of going on up.

"Say," says this man who tells the tale, "wish you could have seen his face when he got that letter from the boss at home telling him his new job was ready when he was! Looked like a tin pan in a New England kitchen."

DISPENSARY AND OUT-PATIENT WORK

Conducted by MICHAEL M. DAVIS. Jr.
Director of the Boston Dispensary.
Please address items of news and inquiries regarding Dispensary and Out-Patient Work to the editor of this department, 25 Bennett street, Boston, Mass.

MEDICAL SOCIAL DIAGNOSIS THE KEYNOTE OF HOSPITAL SOCIAL WORK*

Need Felt as Early as 1840—Essential in Dealing With Dependent Poor, And in Community Development Through Programs of Public Health and Social Reform

By IMOGENE POOLE, Director, Social Service Department, Cincinnati General Hospital, Cincinnati, Ohio

One of the most striking factors that the war has emphasized in working out programs of reconstruction is the need for a knowledge of the medical and social status of the problem before determining proper methods of treatment.

The importance of this factor—medical social diagnosis—was felt as early as 1840 when public health work was started in Great Britain, and later in this country when charity organizations directed their efforts into the field of public health. Those organizations by supplementing medical treatment, by eliminating unhealthful living conditions, and through education started great preventive movements such as the antituberculosis movement. This was followed by the requirement of courses in social science in the school of medicine, University of Indiana, by Dr. Charles P. Emerson for the wider training of medical students to fit them for public health work, and, during recent years, the schools of civics and philanthropy have enlarged their curriculums to include training in medical social service to prepare social workers to deal more adequately with the problems of maladjustment.

In 1905, Dr. Richard Cabot, feeling the need for some one who would first discover the contributing social cause of disease and thereby aid the physician to make a more accurate diagnosis; and second remove the cause and thus aid in making medical treatment more effective and prevent recurrence of illness, organized the social service department in the out-patient department of the Massachusetts General Hospital. Since that time the need for hospital social workers has been generally recognized with the result that there have been established in the United States nearly 200 hospital social service departments.

The physician and social worker now realize that medical social diagnosis and treatment are essential:

1. In dealing with the dependent poor whether in their homes, or in hospitals or dispensaries.

2. In developing community programs for public health and social reform.

*Read at the Annual Meeting of the American Hospital Association, September 12, 1919, at Cincinnati, Ohio.

Social agencies are more and more recognizing the importance of medical examinations, physical and mental, of their clients before working out plans involving responsibilities that they cannot possibly meet. Too often an applicant for relief has appeared to be unwilling to seek employment or to hold a job once he has it, when, as a matter of fact, he was physically or mentally unable to do so. Perhaps case conferences such as those held by hospital social workers in conjunction with members of cooperating medical and social welfare organizations have aided more than any other single factor in emphasizing the necessity of combined medical and social diagnosis so essential in working out constructive plans for the welfare of individuals, families or communities.

This cooperation, growth, and wider use made of the medical service by the social agencies and vice versa have proved to us that a general hospital which cares for the dependent poor of the city, many of whom are known to the local charities, can ill afford to be without a social service department. Such a department is the connecting link between the patient in the hospital and the outside world, and the medium through which plans are worked out for the patient's welfare in connection with the outside medical and social agencies.

While the primary aim of all hospital social work is to look after the needs and welfare of the patients, whether in a hospital for chronic conditions such as a tuberculosis hospital, or in a general hospital for acute illnesses, the type of social work necessarily differs.

In a tuberculosis hospital, where the treatment is of long duration, the physician and social worker must get the confidence of the patients and relatives and impress the necessity of continued sanatorium care. While the physician continues with medical observation and treatment, the social worker discovers and relieves the patient's mind of any outside worries, sees that his family is well cared for during his stay in the hospital, affords various forms of temporary activity such as bead work, weaving and basketry, and organizes recreation and entertainment, always aiming to make the patients happy and contented and thus aid in their more speedy recovery.

Even to a greater extent is the work of physician and social worker interdependent in a general hospital caring for acute conditions only. Here the social worker must discover the living conditions, habits, family relations, and economic conditions to supplement the physician's diagnosis in order that they may plan for the most effective treatment and after care of the patients. Especially is this necessary in dealing with nervous patients, in whom the cause of illness, which may be worry, can be eliminated and the patient saved from an early return to the hospital.

In the admitting department of a general hospital, the social worker should have a voice in deciding whether a patient, from the social point of view, is a hospital case. For example, after examination, many applicants are referred to a dispensary for treatment. Under normal conditions, they would return home and attend the dispensary at the designated time; but quite frequently an applicant claims that he is unable to work and has no place to stay while receiving treatment at the dispensary. Social investigation shows that applicant has neither funds, relatives to aid, nor a place to stay, while attending the clinic. This pertains particularly to those who live alone in furnished rooms or lodging houses with no means of support when ill, and who when in need of medical care must necessarily be admitted to the hospital wards because of financial circumstances.

On the other hand, the social worker keeps out those who are not hospital cases, and quickly disposes of those for whom hospital care can do no more good. To illustrate: very often homeless persons apply for admission to the hospital. The doctor diagnoses the case senility, inoperable carcinoma, homeless, etc.—not a hospital case. The hospital, of course, cannot be filled up unnecessarily with such patients, nor can the applicants be turned away, for the chances are they would be brought back in a few hours really ill from exposure and starvation. The social worker diagnoses the case socially and arranges for the necessary care at the homes of relatives, or at a temporary rescue or convalescent home, pending the working out of future plans.

Following the physician's examination and diagnosis of non-resident applicants, where the physical and mental conditions permit, the social worker plans for the non-resident's return to his place of legal residence for the necessary medical and hospital treatment rather than to maintain in the hospital wards at the city's expense residents of other communities.

While most general hospitals are primarily for the care of the dependent poor of a community, they, nevertheless, care for some patients who, though unable to pay for the services of a private physician or at a private hospital, are anxious to pay something for hospital treatment received. A social worker trained in a knowledge of economic standards and relating social conditions of individuals and families can determine whether and how much an applicant, whom the doctor has diagnosed as in need of hospital care, can pay. This also affords a means of checking up those who should seek the services of private physicians when able to pay for them. My experience has led me to believe that at least 50 per cent of all patients admitted could pay something. At any rate, the amount paid by patients which ranged from three to eighteen dollars per week through the efforts of the social workers has been more than enough to maintain our social service department.

Continuing the war program of the Interdepartmental Social Hygiene Board, the Cincinnati General Hospital maintains an isolation ward for the hospitalization of venereally infected women. We shall have advanced further in the check and spread of venereal diseases when we quarantine the men who are known associates of the diseased women.

In dealing with the quarantined women, especially the young girls and first offenders, a complete physical, mental, and social diagnosis is necessary before attempting to work out any plans for their future welfare.

Physical examinations show many of the girls to be almost physical wrecks and ignorant of the serious after-effects of gonorrhea and syphilis. Mental diagnosis is fundamental in determining who of the group should be in institutions for the feeble-minded and moral degenerates, both for their own protection from outside influences with which they are unable to cope, and for the protection of society against the spread of venereal diseases and the procreation of a new race of defectives. A knowledge of the mentality ascertained by psychological tests is of importance in aiding persons of low mentality to find work that is not too strenuous.

While a knowledge of the mentality is the basis upon which to build plans in this protective work with girls, there are other factors that influence the lives of young people and that must be met as community problems. How can we expect to bring out the best that is in youth unless we replace bad influences with good? We must make possible healthful living and moral conditions at home during early child life, afford early training in the various remunerative occupations, and secure earnings that are sufficient to properly maintain and clothe a girl. Moreover, throughout the country there must be proper educational and recreational facilities to fill the needs and satisfy the desires of young people.

The limitations of my subject and my time will not permit me to discuss the plans of follow-up work with the adult sex offender. But experience has proved that the social worker can best keep in close touch with the patients after their discharge from the hospital by bearing in mind the medical point of view and seeing that they return to the dispensary for treatment at stated intervals.

In a hospital such as ours where 16 per cent of all maternity cases are illegitimate and from 40 per cent to 45 per cent of these so low grade mentally that they should be in an institution, it is necessary that the social worker have a knowledge of the physical, mental and social diagnosis of each illegitimate case in order to know what plan to pursue for the best interests of the patient and the child. Where the mother of the child is feeble-minded and repeatedly brings feeble-minded children into the world to be neglected, commitment to an institution of the industrial type where they will be permanently segregated should be compulsory. Case after case could be cited where, because the feeble-minded girl was not protected, she was at first unmanageable, then delinquent, next an illegitimate mother, and finally a prostitute and spreader of disease. When the mother is mentally and morally fit, plans can be made to enable her to keep her child in most instances. Success with such women means a long period of wise and friendly contact between patient and worker.

Medical social diagnosis extended into the field of welfare work in industries when the medical and social status of the individual employee is ascertained is of immeasurable value:

1. In making for the efficiency of the employee by remedying the bad social conditions under which he lives and which make for illness, discontentment, and consequent loss of time from the shop.

2. In returning the man injured in industry to the industrial world.

To be sure, our state industrial commissions see that the sanitation and health hazards in industry are well guarded, and that injured workmen receive medical care and compensation for their injuries, but that is meeting the problem only partially. As Mr. Douglas C. McMurtrie has so ably demonstrated in the Red Cross Institute for Crippled and Disabled Men in New York City, the war has taught us that we can and should apply the same methods to the industrial cripple that the government is applying to the rehabilitation of disabled soldiers and sailors.

If on account of his peculiar injury the industrial cripple will not be able to return to his former occupation, we should reach him as early as his mental and physical condition will permit upon his arrival at the hospital. With a knowledge of the patient's mental and physical condition at hand obtained from the physician, the social worker then ascertains the patient's interests and vocational desires. With such a foundation occupational direction can be begun as early as bedside work to keep the patient's mind from brooding and continued later in a curative workshop equipped with appliances actually used in industrial and commercial life. Such work can best

be measured in terms of patient's early recovery and return to the industrial world as a self-supporting citizen instead of a handicapped pauper.

Nor are we using to the fullest extent the collective knowledge gained through medical social diagnosis of individual problems, unless we, together with the coordinating social and public health agencies, reach out into the community and organize resources to meet its needs and work for the elimination of the social causes of disease and social maladjustment.

Thus was the night clinic established to meet the needs of those who though referred for continued treatment after leaving the hospital to insure complete recovery, found it impossible to follow out the physician's instructions because they were unable to take time off from their work to attend the day clinic. The facts gathered from the influenza epidemic with its tragic consequences, broken homes and weakened bodies, were the foundation upon which the public health stations were established throughout this community to meet the need for further medical and social diagnosis and follow-up work.

Finally, it is important that students of medicine, nursing, and social science be afforded an opportunity for field work in a laboratory, such as the social service department of a large general hospital, in order to work out the interrelation of medical and social diagnosis, so fundamental in meeting the needs of individuals and in the development of community programs.

HEALTH SERVICE FOR STUDENTS CRYING NEED OF COLLEGES

Five Years' Experience of The University of Michigan Demonstrates Practical Method—Possibilities of Such Organizations in Developing Public Health Education

"Few colleges have developed a real health service for their students, but there are many that need one," writes Warren E. Forsythe, M.D., University of Michigan, Ann Arbor, in the *American Journal of Public Health*. "The development at the University of Michigan with five years' experience ought to be helpful to institutions throughout the country."

The University health service was organized in 1912 as the result of the demand for added facilities for medical attention to students which was met for many years by its medical school only. Its general scope included all phases of university and student life which might affect student health; but as the greatest demand was for attention to sick students, the clinical work was inaugurated first and has since been the main activity.

The personnel in the beginning included four full-time physicians—three men and one woman—two dispensary nurses, a pharmacist, and a stenographer. Dr. H. H. Cummings was the head. Later a laboratory assistant and one physician were added. The physicians engaged in general rather than in specialized work, and were given faculty standing in the department of administration with graded rank and salaries such as existed in established lines of public health work.

A general student annual fee of $4, collected by the university at registration, was the source of the financial support. The expenditures which were governed the same as for other departments exceeded the income in only one year. Owing to the decreased attendance during war time, the fee was increased to $6.

A fairly complete dispensary was established in a building near the campus and served as headquarters for the service. As the greatest demand has been for attention to sick students the dispensary has formed the center and, early becoming overcrowded, remains inadequate. Liberal hours are maintained, so that students of both sexes may receive unrestricted office attention and ordinary medicine without charge. Prescriptions are filled in cooperation with the university department of pharmacy. Students who require the attention of specialists are referred to the university hospitals which cooperate with the Health Service. Records are kept and reports are furnished the university authorities at intervals.

Students often report for very minor troubles, but this is not discouraged, as the earliest possible attention is often most important. The facilities of the service are available to summer school students the same as to those of other sessions.

During a typical year, the total dispensary calls numbered 26,896; total patients, 5,792; average daily calls, 110; estimated average expense per call, sixty-five cents. Permanent records are kept of each call.

Hospitalization is part of the students' privileges in the health service. Such patients are sent to the hospitals, operated by the medical departments of the university, and are entitled to necessary attention free for a limit of sixty days.

For calls made on students at their rooms, the university collects $1 for day time, and $2 for night, the money being placed to the credit of the health service. The number of such calls in 1916 and 1917, a typical year, amounted to 433.

Prevention of disease and the improvement of health—tuberculosis survey of students, rooming and boarding house inspections, and occasional health lectures—are given attention.

Since October, 1917, some changes which experience showed to be necessary have been made:

The students have been given absolute freedom in the selection of a staff physician, and the privilege of going to private hospitals in addition to those of the university. The routine for handling large numbers of patients has been standardized; and all new students receive a more uniform, careful and completely recorded examination in cooperation with the departments of physical education soon after entrance to the university. These records will be of great value in the subsequent care of these students. All freshmen in the literary and engineering departments will be given a series of required lectures and demonstrations concerning the care of their health, and compulsory courses of longer duration in personal health are desirable.

Such an organization has large possibilities through cooperation with other organizations in developing health education.

A Great Saving in Expense from Loss—Cost Is Trifling When Net Is Made at Home

By LINA STRYKER FISH, Housekeeper, Municipal Tuberculosis Sanitarium, Chicago

Apparently among the smaller things in a laundry but among those that play a great part is the washing net. There can never be too many of these used, for by its use are many small articles, such as handkerchiefs and collars, saved from the drain, to say nothing of the more expensive articles, such as sleeves of shirtwaists, belts of aprons, nurses' bibs, etc. If there is any question about it, put the clothes in a net.

A very good substitute for the made net is machine-manufactured net bought by the pound; it is quite reasonable in price and can be made in sizes to suit.

THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment, and Administration of Hospitals, Sanatoriums, and Allied Institutions, and to Their Medical, Surgical and Nursing Services

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MAKING THE HOSPITAL A PLACE OF BEAUTY FOR THE PATIENT*

Stimulating Patients' Happiness One of Chief Requisites of Hospital Architecture and Equipment—Suburban Site Desirable—Best Possible Ventilation a Necessity—Simple and Dainty Effects To Be Aimed at in Furnishing Patients' Rooms

By WILLIAM ORR LUDLOW, of Ludlow & Peabody, Architects, New York City

HOW much do the aspects of our surroundings affect health? Not long ago I visited the Mammoth Cave in Kentucky and there was pointed out to me in one of those subterranean avenues two little huts built some sixty years ago on the theory that tuberculous patients living in that never-varying temperature of 58 degrees would be greatly benefited. I need hardly tell you the result; three died in the cave inside of three months, and the others shortly after leaving the depressing place.

Whatever the effect of the even, cool temperature, we need no argument in these more enlightened days to persuade us that the gloom of a cave existence, the lack of revitalizing sunlight, the absence of color, the dread aspect of rugged, black, overhanging rock, and the grewsome reverberation of voice and footsteps were in themselves enough to depress the mind to such an extent that eventually the body could not endure. The fact that the body suffers with the mind and rejoices with the mind—especially when the body and mind are both in the sensitive state induced by illness—is too well known to need repetition. I conceive it, then, one of the functions of the hospital building and its equipment and furnishings is to minister to recovery by providing those surroundings best adapted to mental happiness, as well as by providing the hygienic condition and service which have for so long been our first care. In this brief paper I shall endeavor to make a few suggestions relating to the patient's comfort and applicable to existing buildings, as well as to new construction.

Fig. 1. The soft lights and stately pillars give an air of quiet dignity and elegance to this attractive foyer.

But first let me say, relative to new buildings, that I believe we should build our city hospitals more generally in the immediate suburbs rather than in the thickly-populated districts. True, a

*Read before the Twenty-first Annual Convention of the American Hospital Association, Cincinnati, September 8-12, 1919.

certain number of hospitals, especially for emergency cases and for ready access for the medical profession, must be near centers of population; but these in number should be the minimum. What is less conducive to the comfort of the patient than the outlook on narrow city streets and little back yards, the lack of breeze on stifling summer nights, the hundred street noises never ceasing by night or day, the air laden with city dust, and the lack of sunlight? Ready accessibility by automobile puts the hospital building located in the suburbs in these days in quite a different light, and I should advise those who have building in contemplation to consider most seriously suburban or rural location.

The exterior aspect of the building is a consideration of some weight. The antipathy of the average person, now fortunately being to an extent modified, is due no doubt partly to the uncompromisingly stern institutional look of so many of our hospital buildings, particularly those of the earlier types. The responsibility for this rests squarely on the shoulders of the architect, for funds for elaboration and expense are in no wise necessary to an air of comfort and unconventionality.

Of those trustees and managers whose charge is an old building I would ask: What have you done with perhaps even your few square feet of surrounding ground? I have seen even factories made to extend a welcome by a judicious planting of cedars, shrubbery, vines, and grass.

Now, as we enter the building, what impression is made on the mind? Does the stern and sterile aspect of the lobby and reception room remind us that this is an institution, and does the apprehensive eye of the prospective patient seem to read from his surroundings, "Abandon hope, all ye who enter here"? We are not really afraid of germs in the lobby and reception room; then why not let warm color, rugs, and dainty hangings say, "There are kindly people here just as in your own home, who will minister to your comfort."

To you of the old building again, have you looked over your entrance carefully to see whether its air of friendliness would not be greater if you had a few wicker chairs, a warm floor covering, light window draperies, and a little bright wall stencilling?

But the greater part of the patient's time must be passed looking at the four walls and ceiling of a ward or private room. Except where greatest economy demands, or for certain types of patients, the public ward will some day give place largely to single rooms, and thus the greatest obstacle to satisfactory surroundings will be overcome. But even in the ward many of the following considerations are applicable.

For the comfort of the patient the best possible ventilation is, of course, a necessity; and personally I believe that, for single bedrooms and even for most wards, Nature's good fresh air taken direct from out-of-doors provides the best, even though at times quite unequal in quantity and quality. Artificial ventilation by blower and exhaust fan is essential to operating and anesthetizing rooms, kitchens, and often laboratories, toilets and utility rooms, but I believe the considerable expense involved and the uncertain regulation by attendants make it undesirable for private rooms and wards. Such rooms should be equipped with solid wood transom sash over windows and doors and inclined adjustable deflectors for the lower window sash, but it should always be remembered, as conclusive experiments have shown, that the quality of air is less important than the flow of air which removes constantly from the body the stagnant air envelope which prevents the proper breathing of the pores of the skin.

Comfort also depends to a large extent on the lighting, both natural and artificial. Every patient's room should have direct sunlight during some part of the day. The good cheer of sunlight as it falls on floor or walls is of great therapeutic value, quite as much psychologically as physically. Shades of which the position is adjustable and which pull both up and down permit of covering only the necessary portion of the window opening and make possible the inflow of air without the troublesome flapping.

The worst type of artificial lighting in the patient's room is the ceiling fixture, either direct, indirect, or semi-indirect; for it puts the light squarely in the patient's eyes. The semi-indirect is the least objectionable, as it gives greater diffusion of light, but even so bright a ceiling is trying to the eyes of one lying in bed. Moreover, a room never looks so cheerless as when illuminated by light diffused from a white ceiling, for practically all shadows are eliminated, and shadows are not only what we judge size, shape, and position by, but are so essential for the satisfaction of the eye that architecture as a fine art is, to an extent, a study of high light and shadow.

The most satisfactory patient's light is set behind the bed on the wall and so designed that the direct rays from the lamp are thrown on the bed where most needed, while the opalescent canopy over the lamp throws a soft diffused light through the room for general illumination. The lamp should be of a type that provides two or three different intensities by the pulling of a cord.

To you who have the old building, let me suggest that a most satisfactory light is the portable, which is attachable to the head of the bed, and which may be either turned upward toward the ceiling for general illumination or downward onto the patient's bed, at the same time using the adjustable intensity lamp, the lowest intensity of which gives just a faint glow in the room when the fixture is turned toward the ceiling, thus making a most desirable night-light. In the wards, a reflector light sunk in the floor, and covered with heavy ground glass, gives the ideal night light.

In furnishing the patient's room, I would suggest the sweet, simple, dainty effects that the colonial bedroom provides, with furniture of simple lines, without mouldings but with color. The effect to be desired, of course, is "homelikeness." Pictures which will do more than almost any other one thing to lead away the tired mind, and which give the finishing touch to "homelikeness" should always be part of the furnishing. Their dust-collecting propensities are small when one considers the relatively large surfaces of the furniture, window ledges, sash frames, and transom bars.

Color has a much greater therapeutic value than commonly supposed. High keys and violent contrasts have by experiment been shown to excite the sensory nerves to a degree causing actual distress. Note how sparingly Nature uses red and orange; even the glories of the sunset are allowed to last but a few moments; and the red flower in the fields is exceptional. Were it not that as much light as possible must be conserved in our rooms, green—Nature's predominating, most endurable and most restful color—would be ideal. But, as light is admitted through a comparatively small opening, it is necessary to preserve its quantity by reflection from walls and ceilings of light tones. White is too extreme. The sunlight tones of cream, buff, and yellow should always be used in rooms of north exposure, and French greys, or light Nile green, where direct sunlight is more abundant. Blue is a depressing color when in large surfaces; and pink, which verges toward the red tones, should be used sparingly.

The high tones can and should be used in wall and furniture stencil decorations, furniture coverings and window curtains, just as Nature gives cheer to man by fields dotted with flowers—yellow, blue, and occasionally red.

Food served on china simply decorated brings a joy to jaded appetites and weary minds, just as the flowers of the field bring refreshment to the traveler.

There are two other matters related to the comfort of the patient which I will briefly mention. With the first of these—odors—you will perhaps feel the building itself has little to do; that is partly true, but odors must be generated in a hospital and the problem is simply one of removal.

Fig. 2. Not only contented, but happy, must be the occupant of this room, which provides so well for his physical comfort and at the same time recognizes his appreciation of the æsthetic.

The architect must do his part by providing adequate means of ventilating everything; and the attendants and nurse must bear the responsibility of using them to capacity, for of all of the elements that go to make antipathy for the hospital, none is more compelling than the "hospital odor."

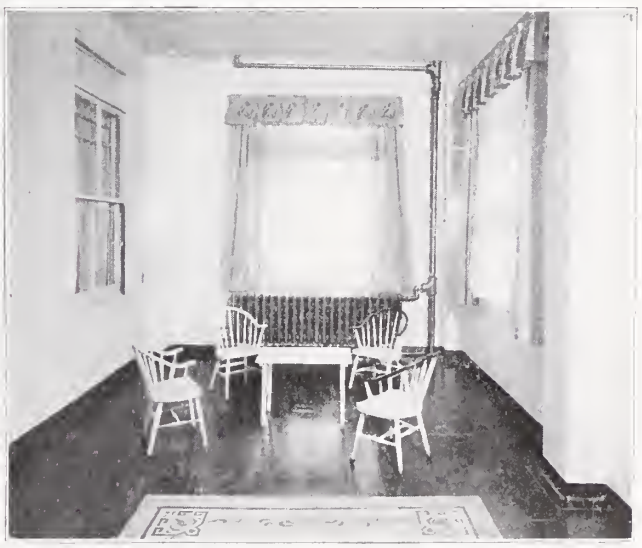


Fig. 3. An artistic corner devoted to the little ones. The tulip-bordered hangings and snow-white curtains reflect the sunshine in a manner to make their tiny hearts rejoice.

There is joint responsibility again in the matter of noises. The building should make quiet possible by the use of automatic door closers and arm-hooks instead of the noisy latch; elevators should operate by direct current motors where possible; door hangers should be of a noiseless

type; and the cars should always open into a vestibule and not into a hallway. Linoleum should be used in hallways and in the aisles of the wards.

In concluding this paper, let me say that I have ventured these few suggestions relative to the comfort of the patient not merely that his enforced sojourn may be a trifle less irksome, nor yet with the stronger motive of healing of the body made surer and quicker by comfort and peace to the mind; but far more have I had in thought the widening of the scope of the hospital to possibilities perhaps never dreamed of through the overcoming of that great deterrent to entering hospital care—the time-honored, let me say traditional, dread of that grim and austere place where sickness, misery, and death seem to so many to reign supreme.

The hospital is the natural and proper place for thousands of cases that now are treated in inadequate home environments; and, once can a feeling toward the hospital as a place of rest, comfort, kindly attention, and care take the place of antipathy, the hospital—with the church and the school—the greatest of all institutions, will have its rightful place and scope. Then, like the Red Cross nurse to our soldiers on the battlefield, will it be thought of only gratefully and lovingly as the Greatest Mother in the World.

A HALF CENTURY'S STEADY GROWTH IN USEFULNESS

From Small Beginning Boston Children's Hospital Has Attained World-Wide Renown—Convalescent Home in Country Cares For Little Ones of Poorer Families Until Entirely Cured

By Our Eastern Correspondent

THE Children's Hospital of Boston was incorporated March 22, 1869, and, having secured a house at 9 Rutland Street, started in with accommodations for twenty children and necessary help. The first patient was received July 20, and during that year thirty children were cared for. The following summer the patients were moved into a new and larger building which had been leased on the corner of Rutland and Washington streets. That year the total number of children received was sixty-nine, and in 1871, ninety-seven. In 1872, the Sisters of St. Margaret took charge of the hospital and, from then up to 1917, when they resigned, spent themselves lovingly and generously in its service.

Fig. 1. Just a modest four-story structure—this was the beginning in 1869.

The years following 1871 saw a steady growth in the usefulness of the institution, and in 1874 the hospital was obliged to turn away children because of the absolute lack of facilities. In the summer of that year a small beginning in the way of a convalescent home was made, and accommodations for six children and a nurse were obtained in Weston. About this same time it was decided to organize an outpatient department in order that the large number of children who did not need ward care, or for whom prolonged supervision was necessary, might have the advantage of skilled treatment and of the hospital resources. A house at 1525 Washington Street was taken over, and the clinics were held three days a week.

In 1873 a group of women who had been intensely interested in the hospital formed a ladies' aid association, which most successfully cooperated with the managers in equipping the hospital with necessities and comforts. In 1875 these ladies opened a convalescent home in Wellesley where twelve children at a time could spend long

Fig. 2. Twelve years have meant much in the way of growth. As the hospital appeared in 1881.

happy hours in the sunshine and grow strong and joyous in the country. The majority of the little ones came from homes where sun, fresh air, and nourishing food were unknown, and, previous to the opening of the home, the hospital had been seriously handicapped by having to return the children to such unfortunate conditions before they were entirely cured. During the first few years the home was open from May to October, but later it was used the year round. In 1879 it was enlarged to accommodate the steadily increasing number of needy cases.

From 1876 to 1880 the hospital continued to grow and to become known throughout the community as the hope of sick and suffering children. Up to this time no other institution had reached out for these poor little ones and impressed upon the public at large that prompt and intelligent treatment of a child might prevent the possibility of the deformity from a tuberculous joint, or that proper care of a child with an acute heart disease might limit the danger of its becoming chronic and resulting in a life of invalidism.

In 1880 the out-patient department in its first annual report stated that it had taken in 251 patients; in 1881 that number had increased to 336. At this time a subscription of $95,000 was received and land was purchased on Huntington Avenue for $30,000. The corner stone was laid in June of that year. On the twentieth of Decem-

Fig. 3. Modern in every respect, the Children's Hospital as it stands to-day is one of Boston's most imposing structures.

ber, 1882, the new hospital was opened for the inspection of the public, and on the day after Christmas it was dedicated. The capacity of the wards was sixty patients, with three rooms set aside for private cases. The wards were large and pleasant, and everything was planned for the most efficient medical and surgical care of children.

In order to control the manufacture of surgical apparatus for deformed children and to supply the poorer people with such apparatus at low cost, a shop was built and equipped adjoining the wards.

In 1864 owing to the growth of the hospital, a wing was added for a new out-patient department. The third floor was divided into a series of small wards for medical cases with single rooms, to be used in the event that either the medical or surgical patients should require such quiet. The years following the opening of the new hospital were years of remarkable achievement and success. The institution became known not only throughout the country, but abroad as well, for the original work done by its medical and surgical staff, and for the excellent results obtained by its improved methods of treatment. Patients were received from all over the United States, Canada, and England. A department for diseases of the nose and throat was opened in 1889 and fulfilled a much needed want in the community.

In May, 1891, a training school for nurses was established, and at the end of the first year eight nurses were graduated.

The hospital had taken 758 patients into its wards during 1896, and in the out-patient department 2,755 new cases had been received. In 1898, 910 cases were treated inside the hospital, and 3,145 new cases were cared for in the out-patient department. The convalescent home was opened during the entire year, and 355 children profited by its care. During these years, a visiting nurse had followed up cases from the out-patient department where special teaching of the mother and supervision were needed. The training school had given courses at the Infants' Hospital at St. Margaret's, and in 1898 fourteen women were graduated. A house on Gainsboro street was leased for a nurses' home, with accommodations for eight nurses and one sister.

At the end of 1900 the hospital reported 1,394 children treated in the wards, 1,712 new cases received in the out-patient department, and 440 children cared for in the convalescent home. The constant pressure of an increasing number of children showed the absolute inadequacy of the hospital building and the necessity for a larger and more modern building. In 1904, however, the convalescent home was burned, and it was thought best to defer plans for a new hospital until a new home was put up. This was accomplished in 1905, when a larger and very beautifully appointed home was built and dedicated. As it stands, one hundred children are easily cared for under ideal conditions.

In 1911 the fund for the new hospital seemed sufficient to warrant starting the work, and plans

Fig. 4. When the circus comes to town, the little sufferers forget their troubles.

were begun. The spring of 1914 saw the buildings completed. In June the children in the hospital on Huntington avenue were moved into the new hospital, and new patients were received. The general wards of the new building have accommodations for 132 children. Although the private ward can take in eighteen children and some of the rooms have accommodations for a mother or a special nurse, the demand for more rooms has been urgent and pressing. A private ward with twice the capacity could easily be filled the year round. This is proved over and over again by the fact that, although the private ward leaves a great deal to be desired in the way of situation and facilities, the pressure for accommodations there remains constant.

The expansion of the hospital was immediate. During the months from September to December the number of patients in the wards increased 44 per cent and the visits made to the out-patient department, 36 per cent. In 1915, a comparison with the figures of 1913 showed an increase of 74

per cent in the number of patients in the wards, 42 per cent in the number of operations, and 74 per cent in the number of out-patient visits. The new hospital wards make it possible to care for the children under ideal conditions, with plenty of fresh air and sunshine, and with the minimizing of the occurrence of contagion by the grouping of patients in small units. The out-patient department has plenty of room for its very large clinics, and its admirable equipment of operating rooms, plaster rooms, gymnasium, and laboratory guarantees a satisfactory handling of such clinics.

The school of nursing has increased in the number of pupil nurses to meet the demands made on it from the various hospital departments and affiliations. Its high standing enables it to meet the requirements of the Board of Regents in the State of New York, as well as those of the state and national associations of nurses.

Following the epidemic of infantile paralysis in 1916, the hospital was requested by the Commission on After-Care of Infantile Paralysis in New York City to loan its instructor in physical therapeutics to New York to instruct nurses in muscle reeducation; and, during three months of her absence, New York nurses were sent to Boston to be instructed, partly at the Children's Hospital. The commission appointed in October by Harvard University to study infantile paralysis was requested by the State Department of Health of Massachusetts to conduct the after-care of infantile paralysis in Boston, and this commission in turn requested the infantile paralysis clinic at the Children's Hospital to serve as central clinic. This has extended the influence of the hospital throughout the community, and has founded an important relation with the State Department of Health and with Harvard University, a relationship which has been of great gain to the Children's Hospital.

A TUBERCULOSIS HOSPITAL CONSTRUCTED AT LOW COST*

Compactness One of Chief Characteristics of Rhode Island Institution—Built-In Screens Unusual Feature—Window Sashes Enable Wards to Be Converted Into Covered Porches

By HARRY LEE BARNES, M.D., Superintendent State Tuberculosis Hospital, Wallum Lake, R. I.

IN 1911 the special commission appointed to investigate the need of a hospital for advanced cases of tuberculosis reported favorably, and in 1915 the General Assembly authorized the expenditure of the $150,000 bond issue to build and equip the new hospital on the grounds of the state sanatorium. The board of control and supply, which was responsible for the work, authorized the preparation of plans and specifications by a committee consisting of Mr. Walter F. Fontaine, architect, Dr. Dennett L. Richardson, and myself.

It was decided to locate the new hospital north of the employees' building. An open space of 200 feet was allowed in order to obtain a better view and to prevent employees from being disturbed by the coughing of patients. To safeguard the lives of bedridden patients and to secure a permanent investment, a fireproof building was the only one considered. The building has practically no wood or other combustible material except doors, window-frames, and sashes. The door frames in the three upper floors are of steel. The doors and windows of the stairway and elevator shaft contain wire glass. To eliminate the connecting corridors which waste so much space and money in the construction and upkeep of institutions, the building was built compactly four stories high instead of being constructed as a lower building covering more area. As considerable space was needed for room for employees and offices, the basement floor, which has as much light and air as the first story of any ordinary building, was given over for this purpose, thus eliminating the cellar which is largely waste space in many hospitals.

TABLE I. COST OF CONSTRUCTION AND EQUIPMENT OF THE NEW HOSPITAL

Construction

General contract	$ 85,227.50
Plumbing, drains and fire service	12,679.51
Heating	11,720.72
Architect's services	5,861.37
Electric wiring	4,903.27
Refrigerators and wiring	3,670.00
Engineer's services	1,130.38
Water piping system	872.00
Waterproofing tunnel	750.00
Iron meat racks	395.74
Bronze tablet	139.37
Extra painting	80.00
Telephones	77.55
Claim on Plumber	73.16
Patrol clock	59 00
Mazda lamps	51.00
Estimating plans	25.00
Hospital furnishings	11 36
Grading work	1,166 58
Traveling expenses	200.22
Steam supplies	98.91
Advertising	93.11
Extra hardware	89.30
Lumber	64.75
Drain work—subcellar	30.00
Staking ward	20.44
Plumber's material	13.26
Freight	9.68
Miscellaneous	360.85
Total	$129,874.03

*A criticism of the plans of this sanatorium by a leading hospital consultant will be found on page 424 of this issue. Dr. Barnes replied to this criticism with the article appearing on page 424.

The hospital has a southerly exposure and is well protected by pine groves. The eighteen-bed wards in each wing of the three upper floors are completely flooded by sunshine (whenever there is sunshine) during the cold winter months. As

Fig. 1. A southern exposure permits entrance of sunlight and scent of pine.

spring advances the sun, being more vertical, enters the wards less and less until by May it does not touch the beds, and by July it enters only about two feet on the south edge. The Whitney sashes on the whole south side allow these wards to be converted into covered porches at will. This is of great importance even for hopeless cases, as these patients frequently do not realize that their condition is hopeless and are not contented unless they have the open-air treatment. "Taking the cure" is agreeable to all from April to November, and during the remainder of the year we allow the patients of each ward to decide by majority vote how much open-air treatment they will take. Many of the wards continue the treatment through the entire winter months.

Some authorities prefer uncovered porches for sleeping out in pleasant weather, but such porches cannot readily be obtained in buildings of more than one story, and porches built at the side of ward buildings keep out sunshine and necessitate wheeling beds in and out during unpleasant weather, usually defacing the door casings and beds and ruffling the temper of both attendants and patients. Uncovered porches offer no extra advantages except the psychic one of inspecting the stars before falling asleep. Our patients, many of whom have previously enjoyed sleeping on uncovered porches, have been satisfied with these porch wards.

The three upper floors are exactly alike, each having fifty-one beds divided into two eighteen-bed wards, seven double rooms, and one single bedroom. Each floor can be administered as a ward unit, as it has a dining room, diet kitchen, utility, linen, and examination rooms; or, if preferred, each floor can be administered as two wards for opposite sexes, as there are two locker and bathroom units. We have not found the eighteen-bed ward too large, as particularly noisy coughers can be moved into the rooms in the rear extension. The wards are divided into nine two-bed cubicles by glass partitions which are high enough off the floor to allow complete under-bed ventilation of the ward and high enough above the beds only to interpose between patients sitting up in bed. The two glass sections of the partitions next the foot of the bed are transparent, allowing the nurse to see the entire length of the ward, while the section near the head of the bed is translucent only. These glass partitions are very satisfatcory.

TABLE II. TOTAL CONSTRUCTION

Equipment

Lockers, towel racks, and screens	$ 2,643.00
Elevator	2,635.00
Furnishings, steam tables, food carts, etc.	1,609.00
Electric fixtures	1,196.00
Dental outfit	435.00
Electric wiring and fixtures	256.00
Architect's services	204.78
Engineer's services	155.67
Window shades	83.31
Hospital supplies	1,933.78
Stoves	63.00
Beds and Bedding	6,061.70
Furniture	2,457.60
Hospital furnishings	291.76
Freight	85.00
Advertising	11.37
Labor	4.00
Total	$ 20,125.97
Total cost of construction and equipment (Tables I and II)	**$150,000.00**

The proportion of beds in open wards to those in rooms was given careful consideration, 30 per cent of the beds being put in rooms. After one and one-half years' occupation of the building with over two hundred deaths, we

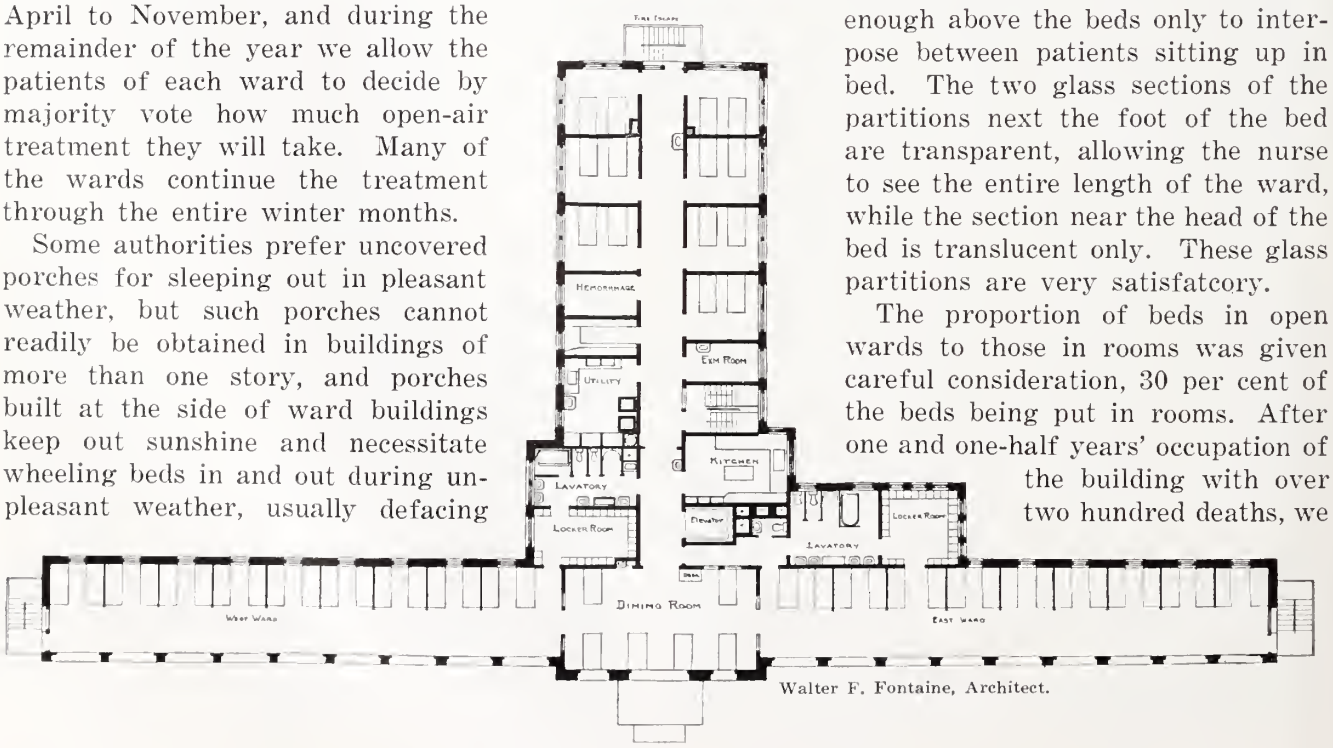


Fig. 2. First, second and third floor plans.

would not change this proportion. If we had less beds in rooms, we frequently would have to bathe patients on the ward and carry bedpans there, while, if we had more patients in rooms, we would have to put some there who, although more or less bedridden, can nevertheless go to the bathrooms, and who much prefer being on the wards where they have the society of other patients, visitors, opportunity to hear music and other forms of enjoyment. We have only one single bedroom on each floor. Another such room would sometimes be convenient, but most of our patients care little for reading or privacy, regard a single room as equivalent to solitary confinement, and object to it strenuously. This is especially true of the men.

A feature of our rooms—unique so far as we know—is that the screens between the beds, necessary when bathing patients or giving them other necessary attention were built in before the building was plastered by bolting part of the fixture to the gypsum block partitions.

When not needed, the screens swing back against the wall. They are much cheaper and much more securely fastened to the wall than any manufacturer's fixture applied over the plaster. The arms are three-eighths-inch iron pipe coated with aluminum bronze and are covered with cotton cloth which slips over the rod like a sash curtain. It was found necessary to omit the battleship linoleum floors specified in the contract, but the granolithic floors have been fairly satisfactory.

Employees at first made some objection to the basement rooms because they were partly underground. These rooms are actually about two feet below the grade, but have two ordinary size windows, and, being south rooms, have about all the sunshine there is. Employees now prefer to leave rooms of unusual size and attractiveness in the second and third stories of our old administration building to occupy these basement rooms, their chief reason being convenient location to the street and the hospital elevator.

Although the period of construction, April, 1916, to January, 1918, was too late to avoid much of the increase in cost of labor and material which occurred about that time, the appropriation of $150,000 was sufficient to cover all expenses, including grading and architect's fees, and of building and equipping

Fig. 3. Glass-partitioned ward showing two-bed cubicles.

ready for use. The structure accommodates 153 patients. As only three of the four floors, or three-fourths of the building, are utilized for patients' quarters, the latter actually cost, equipped, only $735 per bed, a low cost for war times. The basement floor, which is three-fourths above ground, contains, besides eighteen employees' rooms, a waiting room, a visitors' room, doctors' and dentists' offices, a surgical room, x-ray rooms, a laboratory, sewing, blanket, trunk, and autopsy rooms, and a morgue. Conduits were constructed for a future clock system on all wards, and space was left for a vacuum cleaning system. The appropriation for the x-ray was diverted to install a refrigerating plant in the old administration building. The tunnel transmits steam mains and returns, and electric and telephone cables, and is convenient for conveying food from the kitchen to elevators. It cost $5,000.

The above statement of costs includes everything except $1,071 for extra blankets. It includes practically all grading, expect carting of loam.

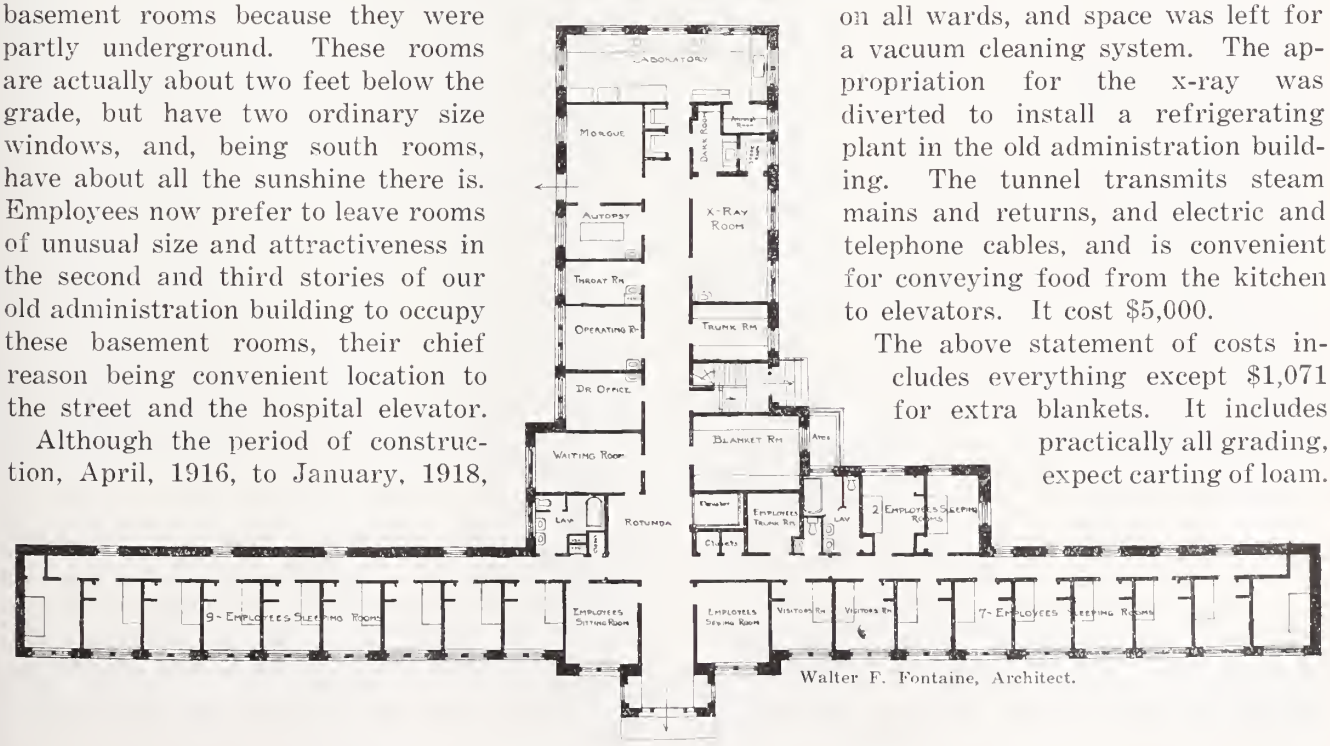


Fig. 4. Plan of basement, showing proportion of space devoted to employees' rooms and offices.

SOME RURAL COMMUNITIES AND WHAT THEIR HOSPITALS MEAN TO THEM

I.—A Middle-Western Community and Its Four Hospitals—Problem of Diagnostic Facilities in a Small Community—Complications Created by Numerous Institutions

By MARY KATHERINE CHAPIN, Contributing Editor, The Modern Hospital, Chicago.

FOREWORD

SINCE this brief series of articles is a tentative venture in a new field, a brief outline of the purposes which direct and the limitations which define it seems advisable.

The hospital exists to serve the community; this principle no one will deny. Yet the technique of hospital administration has become so absorbing that it attracts the almost exclusive attention of experts, and often the hospital seems to be a self-centered world in itself, as it were. Possible a study of the rural hospital in its relation to the rural community may bring to light values which now are sometimes overlooked. The method here chosen is that of a series of sketches from life of a few representative communities with their hospitals.

This preliminary study is made by one person unaided. Of necessity, therefore, it omits or touches but lightly on many important aspects of the broad subject which it introduces. It does not assume to be exhaustive in method or all-embracing in scope. The brief time and limited means at command permit the study of only a few localities, and only the salient features in these. Within these limitations every effort has been made for accuracy and fairness in presenting facts. At the same time the purpose is, not to distribute praise and blame in any particular local situation, but so to present the facts that other communities may draw from these facts any lessons which may be useful to them. Since the purpose is, not to pass judgment on individual communities and institutions, identification of the localities by name seemed unnecessary and unwise. Therefore, although the descriptions in this and the following articles are faithful reports of personal observations, the local names used are all fictitious.

Final conclusions—a solution of the rural hospital problem—would be too much to hope from such a study as this. If it succeeds in furnishing a preliminary definition or scaffolding on the basis of which further and more comprehensive work may, perhaps, be carried to completion, it will have served its purpose.

THE CITY OF MIDVALE, CORTEZ COUNTY

Midvale, the county seat of Cortez County, Indiowa, lies near the center of the county, at a point where the flat monotony of the rich western farm lands is agreeably broken by the wooded hillsides that line the courses of the Indiowa and Red rivers. The 1910 Federal census gives it a population of 9,535—nearly 10 per cent less than the population given in the census of 1900—but this aspersion Midvale indignantly repudiates, and, awaiting the fourteenth census, claims 12,000. Only very mild interest is aroused by the census figures showing that, whereas the population of Cortez County as a whole had increased slightly—less than 5 per cent—during the decade 1900-1910, the rural population of the county had decreased 7.5 per cent.

The region within the county to which Midvale naturally serves as a center comprises an area of, roughly, about two hundred and fifty square miles, with a population still more roughly estimated at about twenty thousand. (I am including within this area only the territory which finds its most convenient transportation to Midvale rather than to Cortez, Brazil, or Selby.)

The population of the community is prevailingly agricultural, American, and well-to-do. Some poverty there is, but concerning its extent and degree opinions differ; the very poor apparently cluster around the local industries such as the plate glass factory and brick works. As evidence of the small extent of poverty is cited the fact that most of the patients of the local public health nurse prefer to pay for her services (from five cents to seventy-five cents a visit). The physicians of the community are said to make good incomes as a rule.

The population of the county, according to the thirteenth census, was 90,000 in 1910. As Indiowa became a registration state for deaths only last year, there are no vital statistics available for the county. The city of Midvale has registered deaths, but has kept the records in such manner that the computation of a death rate would be a hazardous as well as a laborious task. Registration of births in the city has been optional and therefore incomplete.

There are, besides the hospitals, a number of other agencies at work to maintain health and combat disease in this region. Midvale has a part-time city health officer, a medical man. The county physician is likewise a part-time man; he is also, but by appointment, medical director of the Cortez County Tuberculosis Sanitarium. The Midvale school board has recently installed a

school nurse; the Midvale Public Health Nursing Organization supports a public health nurse, who is detailed to this service by the Red Cross; and one nurse at the Cortez County Tuberculosis Sanitarium gives two days a week to work as a visiting tuberculosis nurse. Some deduction must, it seems, be made from the American Medical Directory's showing of forty-one physicians practicing within the territory which has been spoken of as naturally tributary to Midvale, for several of these men have moved away or are no longer in practice. Apparently, however, there are enough practitioners left to supply the needs of the population. To these may be added—if reckoned as an addition—thirteen midwives and several osteopaths and chiropractors, listed in the city directory.

Outside of Midvale, the nearest hospital facilities are ten and fifteen miles away, respectively, in Cortez and Brazil to the west, and Selby to the south; to the north and east there are none within the county of Cortez, nor, indeed, any of more than twenty beds outside the county nearer than about forty miles. The nearest hospitals of two and three hundred beds are about seventy miles away.

Midvale itself has four hospitals. Two of these are private and two public, with a combined capacity of 163 beds. This census of hospitals and beds does not include the Clark Company's sanitarium at Broken Rock near the city, which, as it is exclusively for the benefit of the employees of a corporation operating outside of the county, does not enter into an estimate of local hospital facilities. This count does, however, include one private and one public tuberculosis sanitarium, which between them have over half the total hospital beds—85, to be exact. For diseases other than tuberculosis, therefore, Midvale has a total of 78 beds. Some paralytic and other chronic cases are cared for in the Cortez County Home, outside of the city, which, as it is in no sense a hospital, is not included in this count.

Oswald Memorial, the city hospital of Midvale, is the oldest of the four local institutions, having been founded about twenty-five years ago with twenty-three beds. The newly completed John Haverson Annex now gives it sixty. It is supported in part by endowment and in part by a special city tax, in addition to which is the income from paying patients. Under the terms of the original bequest to the city, indigent citizens of Midvale are cared for free. County cases, paid for by the county, are received, and also private cases, for which rates range from $1.50 a day for ward cases ($1 in the children's ward) to $5.50 for private room with bath. All classes of cases except contagious are received.

The location, in the heart of the business district, was determined by the original donor and subsequently a second bequest, under which the new annex was erected, made an adjoining location compulsory for that building. It has the disadvantage of city noise and dirt, and the advantage of convenience. Accident cases are frequently received, and the local surgeons do practically all their dressings in the hospital instead of in their offices. In a hospital which does not have an intern, moreover, there is decided advantage in being near enough to most of the local profession to be able to call one or another of them at any hour of the night or day.

When this hospital was recently enlarged from twenty-three to sixty beds, the trustees, desiring to improve the standard of service to the same degree, sought for a superintendent with larger experience than that afforded by a hospital of this class. The present superintendent, a registered nurse, who has supplemented experience by special training in hospital administration, takes her profession seriously and even enthusiastically. She undertook her present position (in the smallest hospital with which she has ever been connected) out of a desire to see what could be done toward making a model small hospital, in which ambition the trustees encourage her.

The staff includes a trained dietitian, who also acts as housekeeper. The assistant superintendent has taken training intended to qualify her as an x-ray technician. There is a training school of twenty-five pupils, graduates of which are eligible for state registration, and which affiliates with a city lying-in hospital for obstetric experience. Plans are under discussion for affiliation with the Cortez County Tuberculosis Sanitarium. A ten-hour day is at present in force. The old hospital building is being fitted up for temporary use as a nurses' home. There are no interns.

The diagnostic laboratory equipment is confined to an x-ray outfit, operated, as previously indicated, by a technician. No medically trained roentgenologist is officially connected with the institution, although several of the local practitioners who use the hospital are said to be competent to interpret plates for surgical work. The hospital has no bacteriologic, pathologic, or chemical laboratory facilities.

Oswald Memorial Hospital has no organized medical staff. "Any reputable physician" of the city of Midvale may bring his cases there and treat them according to his own ideas without question. The medical profession show little en-

thusiasm for the provision of complete diagnostic facilities. Such things cost money; those who have the money can have these advantages by paying for them, and those who have not can do without as they always have done.

To the credit of Oswald Memorial Hospital it should be said that the evils of amateur administration of anesthetics, and of fee-splitting under this disguise, are absent, for, by custom rather than rule, all anesthetics are administered by one or the other of two experienced medical men. It is said in the hospital that the local profession is most ready and cheerful in rendering charity work when necessary. Further to the credit of local practice in the hospital is the impression that surgeons who practise there take pride in a careful aseptic technique, in consequence of which postoperative infections rarely occur. This, however, is a matter of impression and not of record; Oswald Memorial Hospital keeps no records of medical performance, and the local profession does not recognize the need of them.

Next in age and in number of beds is the Midvale Tuberculosis Colony. This is a private institution, which was founded in 1904 as the outcome of a campaign carried on by the founder and medical director to interest the public in the principles of tuberculosis treatment, at a time when all doors were closed against the tuberculosis patient, as such, much as they are closed now against the venereal patient. It was the first institution in the Middle West to practise outdoor treatment of tuberculosis, and was intended to serve as a kind of experiment station to demonstrate the value of such treatment and the relative unimportance of climate as a factor. Originally it consisted of a few army tents for sleeping purposes and one large dining tent. The tents have been supplanted by cottages and hospital "apartments," together with such other buildings as are necessary to the medical and physical care of the patients. The location, on high ground overlooking the Indiowa River and the city of Midvale, is most attractive.

The present capacity is fifty-one beds. Nursing care is furnished by a trained head nurse with seven trained attendants under her; the medical director believes this arrangement preferable for tuberculosis to a staff of trained nurses. The superintendent (a son of the medical director) was formerly a hotel man. Rates run from $30 to $40 a week.

A diagnostic laboratory, at first limited in scope, has gradually been enlarged until it now includes facilities for x-ray and bacteriologic work and serum tests of all kinds, as well as the ordinary gastric and urine analyses, etc. The head of the laboratory (another son of the medical director) is a young medical man specially trained and interested in diagnosis. He is assisted by a technician.

The medical director of the Midvale Tuberculosis Colony lays great stress on the value of records in tuberculosis. He has worked out a system of records which, he believes, represent an adequate minimum, if kept up, as here, to give a complete review of the patient's condition each month.

A few hundred yards distant, enjoying practically the same beautiful location as the tuberculosis colony, is the Indiowa Valley Hospital, an institution of eighteen beds. This was founded to serve as a diagnostic hospital. At present the division of work is between internist and surgeon, in the persons of the medical director and one local surgeon called in consultation when necessary. The diagnostic facilities are those of the laboratory just mentioned, which are shared with the tuberculosis colony. For the present, "any reputable physician" is allowed to bring cases in without question or supervision, but this is regarded as a temporary potboiling expedient, to be discontinued as soon as the demand for the services of a diagnostic hospital increases. The only records kept by the hospital are those of the medical director. The superintendent is a trained nurse; nursing service is furnished by a staff of five nurses. Rates are from $30 to $45 a week.

As the Indiowa Valley Hospital and the Midvale Tuberculosis Colony are both private institutions, owned and controlled by members of one family and modeled by the same general idea, they share the same facilities in many respects (laboratories and kitchen, for instance) and much of what may be said of one applies to the other. In both, much intelligent and thoughtful care has been expended on the working out of such details as attractive decoration of rooms, comfortable lighting, the planning of doors and corridors with a view to convenient moving of beds, and, in general, to what may be called "hotel service." In both the hospital and colony there is a frankly commercial or business element; that is, both are business investments, expected to pay running expenses, interest, and profit, like any other investment. This is an honestly expressed principle of management, and seems to be compatible with ideals of a high grade of medical as well as hospital service. It means, however, that these institutions cannot take charity cases.

Across the road, a short distance away, still on high wooded ground, is the Cortez County Tuberculosis Sanitarium, which opened early this year with thirty-four beds. The medical director,

as before mentioned, is the county physician; the superintendent is a trained nurse with a number of years' experience at the head of tuberculosis sanitariums. Three graduate nurses are employed and as has been said, it is hoped to arrange for the affiliation of the training school of the city hospital with the sanitarium, thus giving the latter the use of several undergraduate nurses. The institution owns x-ray apparatus; the superintendent is expected to act as x-ray technician, and the medical director intends to undertake the responsibility of interpreting the plates. A member of the local high school faculty comes in to do bacteriologic work. The record shown me as a specimen of those kept consisted, after the entrance examination, merely of records of temperature, pulse, respiration, medication, and nourishment.

Although the sanitarium was intended primarily for indigent citizens of Cortez County, patients able to pay a little are received and allowed to pay according to their means. The county pays $1.20 a day for the maintenance of county cases. The Federal Government pays for the maintenance of tuberculous soldier patients. The institution is already crowded beyond its normal capacity of thirty-four beds, having forty-five patients at present. An additional pavilion with a capacity of twenty-five beds is being erected. A free clinic is held once a week. As previously noted, one of the nurses at the county sanitarium devotes two days a week to work in the homes of tuberculosis patients.

THE PROBLEM RAISED BY THIS LOCAL SITUATION

Now, what can be said of this group of hospitals as a whole? Do they justify their own existence? Each one certainly fulfills a distinct function and meets a distinct need in the community, although the two private hospitals, of course, are not intended to meet an exclusively local need.

Are these institutions rendering adequate and satisfactory service up to the limit of their capabilities? Certain shortcomings are fairly evident. The two public hospitals obviously need strengthening on the side of diagnostic facilities and records. The two private hospitals supply diagnostic facilities and keep records of their own patients but have not created a general appreciation or demand for these essentials in the community, which might seem to indicate a comparative failure on the educational side.

This suggests the question of the best way to solve the problem of diagnostic facilities in this community. Can diagnosis be given its best development in a small community such as this is by trying to install complete diagnostic facilities in each individual hospital, or by centralizing them? If every hospital has a good x-ray installation, is every hospital going to have a competent roentgenologist—competent, that is, not merely to make plates but to interpret them? Is the community going to supply sufficient material to keep more than one or at most two men in good practice? If the service is centralized for the whole community, on the other hand, what is the best guarantee, particularly if it is performed by a commercial laboratory, that it will be rendered, not merely to those who can pay for it, but to all who need it?

And this, again, suggests that the health and hospital problem of a small community is rendered exceedingly complex in proportion to population by the multiplication of small hospitals. Here are four hospitals, not one a real competitor of another, for each does a distinct work, yet each complicating the problems of existence for the other; only the two private institutions planned to cooperate with each other, and only the Cortez County Tuberculosis Sanitarium (the building of which was preceded by a tuberculosis survey of the county) built after a comprehensive survey of the needs and existing facilities. There are present in Midvale a wealth of good intentions and not a little really creditable achievement, but very little focusing of effort on a common plan. Not that any of these comments should be taken as unfriendly criticisms of the efforts of a community which, like many another, is doing its best to solve its own problems under existing lights and often difficult conditions.

Right here recognition should be given the fact that it is often much harder to bring a public than a private hospital up to any given standard, since, in the case of the private institution, it is necessary only for the responsible head to have a clear recognition of the measures needed and the intelligence and force of character to put them into effect, whereas, to make the same improvement in a public institution may require the education of the local medical profession and the public as well. Oswald Memorial, the little city hospital of Midvale, for instance, although it still shows room for improvement, deserves great credit for progress already made in the face of many difficulties. It may be questioned, indeed, whether the existence near by of a hospital which attracts patients able to pay profitable rates, but which offers no accommodations to others, is not a drag on the public institution rather than a stimulus to improvement in it. Does not the situation possibly tend to lead the public, so far as it recognizes the existence of diagnostic facilities and medical case records at all, to class them with the other luxuries which people can have

who are able to pay from thirty to forty-five dollars a week rather than with the necessities of good medical practice, from which the poorest and humblest should benefit just as much as the wealthiest?

The question is at least raised by the fact that the private hospitals of Midvale seem to have made little impression on the hospital standards of the community. It is presented here, not as implying a criticism or a predetermined answer, but as a point worthy of further study.

Are the hospitals used as much as they should be? As far as use means the filling of beds, apparently they are fairly well used. The two private hospitals are, I am told, kept full; the Cortez County Tuberculosis Sanitarium is already crowded beyond normal capacity; the city hospital was overcrowded before it was enlarged, and the new building is filling up at a rate which suggests that it, too, will soon be filled to capacity.

There are, on the other hand, facts which suggest that the community has not learned to rely on hospitals as much as it should. Physicians say that their patients are reluctant to go to the hospital. The infant mortality figures of the city show a large percentage of still births, probably due in many cases to overprotracted labor, which the attending physician might perhaps have terminated in time to save the child's life if he had had the patient in a hospital. As for the other uses of a hospital—most of which have not even been mentioned here—the community has yet to be brought in contact with them.

Are the existing facilities sufficient to meet all needs? Certain classes of cases are not yet adequately provided for. Thus, as has been mentioned, a number of paralytic and other chronic cases are cared for at the Cortez County Home—an obviously unsuitable place; the city hospital takes care of some others, although no general hospital welcomes such cases; probably still others are cared for in more or less unsuitable homes. Ordinary cases of contagion are quarantined in the homes; neither the city nor the county has as yet any satisfactory plan for meeting the emergency of an epidemic—they would be a most exceptional city and county if they had.

As for the question of the adequacy of existing hospitals to meet the needs of the community, apart from the special classes of cases, such as those just indicated, in the absence of vital statistics one has to rely on impressions. I am told that individual observation leads to the belief that there are many cases which do not receive hospital care but which should have it. It is to be hoped that before any new hospitals are built, and even before the existing hospitals are enlarged, it will be possible to make a survey of the community, ascertaining the essential facts (some of which are not available now), including not only mortality and morbidity figures, but also the social, financial, and psychological factors involved; and, further, to work out a definite, comprehensive community plan, embracing all the existing hospital facilities, the best means of cooperation among them and any new institutions, and some definition of the proper place of the rural hospital in the rural health program.

The problems suggested by the situation in this community are surely not insoluble, but they will not be solved except by pooling the experience of those who are working on one or another phase of them. The interest of our smaller cities and rural communities in questions pertaining to their own health has been underestimated; what has been lacking has been some means of coordinating the scattered efforts of various communities. Not until this is done, so as to permit guiding principles to be drawn from this collective experience, will our rural hospital policy take definite shape so that haphazard effort need no longer be the rule. It is with the hope of contributing in some degree to the data necessary for the creation of a program for rural communities that this series is written.

The Three Crosses

The Iron cross is black as death and hard as human hate;
The wooden cross is white and still and whispers us, "Too late";
But the Red Cross sings of life and love and hearts regenerate.

The iron cross is a boastful cross and marks a war-made slave;
The wooden cross is a dumb, dead cross and guards shallow grave,
But the Red Cross reached out its arms to solace and save.

The iron cross is a Kaiser's cross and narrow is its clan,
The wooden cross is a soldier's cross and mourns its partisan,
But the Red Cross is the cross of One who served his fellowman.

—Edmond Vance Cooke, *American Red Cross Bulletin.*

"Progress toward workmen's health insurance has probably aroused more earnest discussion in a greater number of interested groups than has any other single campaign in the whole field of social legislation. Following as a logical next step the enactment within seven years of workmen's compensation laws in four-fifths of the American states and territories—and with America stigmatized as the only important industrial nation of the world with compulsory health insurance—it is natural that definite proposals for publicly insuring against the wage-earner's sickness should have excited exceptional comment."—John B. Andrews, Ph.D., secretary, American Association for Labor Legislation.

MANAGEMENT OF CONTAGIOUS DISEASE HOSPITALS*

Rules Should Be Practicable and Strictly Adhered to—Method Followed from Time of Notification of Illness Until Patient Is Discharged—Rules Entered In Loose-Leaf Note Book

By D. L. RICHARDSON, M.D., Superintendent, Providence City Hospital, Providence, R. I.

THE technique employed in an infectious disease hospital[1] should be drawn up very carefully and printed. To be efficient the details of every procedure should be lucid and capable of being carried out with the least amount of work. Many institution rules are formulated in such a way that they are not practicable. This must be avoided. The resident physician should consult with the graduate nurses to make sure that the rules are feasible, but whether or not they are efficient must rest with him. Instead of having printed copies, the rules may be entered in a loose-leaf book. A recommendation for such a method is that they can be easily changed or amended. A set should be on the head nurse's desk at all times, so that new nurses may refer to them in case they are in doubt about any procedure. The underlying principle of the technique should be the same for all hospitals but the exact wording will be modified somewhat by the nature of the hospital construction and the equipment. Soon after the Providence City Hospital was opened, we had printed copies of technique, one of which was given to each doctor and nurse and to other employees who come in contact with the patients.

Fig. 1. Town car for transporting ambulatory patients and small children.

The hospital technique which follows will be arranged as logically as possible.

AMBULANCE TECHNIQUE

Before starting.—The attendant goes to the telephone office when notified of a call, gets the ambulance card, and goes to the stable, where he puts on a washable duster and an ambulance cap. The cap is kept uninfected. The driver also wears a duster and a cap. It is his duty to see that the ambulance is supplied with clean blankets and pillow slips.

At the house.—The attendant enters with a blanket on his arm. Before touching anything

Fig. 2. Bags in stables for infected blankets, coats, and pillow cases.

in the house, he takes out his pencil and ambulance card and fills out answers to the required questions relating to the history of the case, previous illness of the patient, or any other sickness in the house. He then puts his card and pencil into an inner pocket, has the mother put on clothing taken from the hospital, a shirt, a night gown, and stockings (provided the parent does not object), wraps the blanket about the patient, and takes him to the ambulance, where he is kept wrapped and actually comes into very slight contact with the interior of the ambulance or town car. Adults who are only slightly ill may walk to the ambulance with the blanket over their shoulders. A stretcher is used when necessary. The ambulance driver helps in the removal of, but does not handle, the patient unless necessary.

At the hospital.—On arrival at the hospital, the patient is taken to the proper admitting room or to the bed. The attendant takes care to have someone open the door for him or else uses the inside of the tail of his hospital coat. The patient is placed on the wheeled stretcher, after which the nurse takes charge of him. The attendant next removes his coat, throws it down the laundry

1. This article includes the technique employed by the physicians, nurses, ambulance attendants, porters and laundry workers.

*This is the second installment of the fifth article in a series on "The Care of Infectious Diseases in Hospitals." The first, "The Care of Infectious Diseases in Hospitals," was published in the April (1919) number of The Modern Hospital; "Medical Asepsis in French and English Hospitals," appeared in May; "Aseptic Nursing in American Hospitals," in July; "Construction of Isolation Hospitals," in August; and the first installment of "Management of Contagious Disease Hospitals," was published in the September issue.

chute, and scrubs his hands with a brush, soap and water. He then completes the ambulance card and gives it to the nurse. He notifies the admitting physician in case he has discovered any other disease at the house, in the patient, or in anyone to whom the patient has been exposed.

The driver returns to the stable, throws his coat into a laundry bag, and washes his hands. After each call the pillow slips and blankets are placed in the laundry bag, and the interior of the vehicle, wherever it has come into contact with the patient, or ambulance or town car is washed with soap and water. Fresh pillow slips and blankets are put into the vehicle.

WARD TECHNIQUE

Admitting patient to main wards.—When the ward is notified that a new case is expected, a bed is immediately prepared for it. The patient is placed on the admitting room truck by the ambulance attendant. In wards without an admitting room, patients are put into the bed assigned them. Infection is then confined to the

Fig. 3. Regulation short-sleeved uniform for nurses.

truck and the table beside it. The nurse places on the truck side or bedside table the following: culture tubes, a thermometer in jar of alcohol, pus basin, throat sticks, a glass slide (if patient is a girl under fifteen years of age) and a stethoscope. A small square of cloth is spread on the floor. The nurse then puts on a clean gown, removes the patient's clothing (if hospital clothing has not been put on) and places it on the sheet.

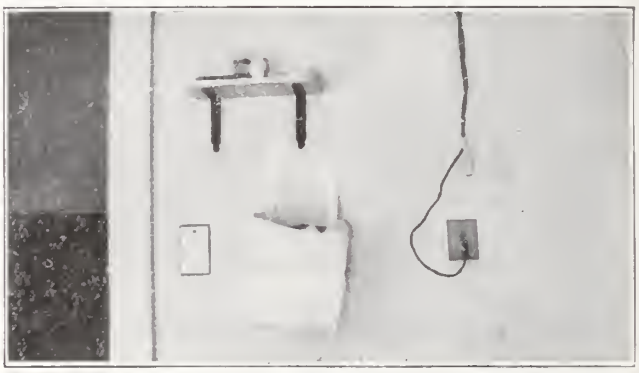


Fig. 4. Unit shelf and paper bag for contaminated articles to be destroyed.

Temperature, pulse, and respiration are taken. Cultures are taken from nose and throat, and from ears if discharging. Vaginal smears are taken from all girls under fifteen years of age, and note is made of any vaginal discharge. The case is then reported to the office as ready for the admitting physician, and is kept in the admitting room or bed, barriered, until he has seen it.

After the examination, the patient is given a tub or sponge bath, depending on his condition; the head is examined for pediculi, tincture of larkspur being used, if necessary, and then taken to the bed previously prepared for him.

The truck cover and blanket are thrown down the laundry chute. Truck and table are washed with soap and water. Throat sticks are thrown away. Stethoscope, pus basin, and anything else which has been contaminated are properly cleaned with soap and water or sterilized by boiling. The bath tub, if used, is washed out with soap and water. The thermometer and nurse's gown may be placed in the room with the patient if needed.

A specimen of urine is sent to the laboratory. Daily and four-hourly charts are prepared, and the patient is put on liquid diet unless otherwise ordered. All new cases are put in dentention except cases with doubtful admission diagnosis, which are barriered. Cultures from nose and throat are repeated on the second day of hospital residence.

Admitting patients to isolation wards.—The admission technique used in the main wards applies also to the isolation wards with the following exceptions: (1) since there is no admitting room, the patient is placed directly in the room assigned to him; (2) he receives a sponge bath only.

Discharging patients.—When a patient is to

be discharged, the nurse puts on a clean gown and removes the patient's clothing in his room. With a sheet about him, he is carried or directed to the bathroom. The sheet is folded so that the outside may be used for the patient to stand on after his bath. He is given or takes a shampoo and a tub bath of soap and water. Clean clothing from the locker room, ward, or home is put on, and the patient is ready for discharge.

In wards with a discharging room, patients receive their baths twenty-four hours before discharge and are then put into the discharging room.

Transferring patients.—When a patient is to be transferred, he is first wrapped in a blanket from the bed. One or two gowned porters then take him in their arms or on a stretcher to the designated ward and room. If a stretcher is used a clean blanket is first spread over the canvas so that only the handles are contaminated.

DETENTION, BARRIER, AND CONVALESCENT CARDS

The card posted on the door of a room may or may not refer to all cases in the room. If, for example, the majority of cases in a room are in detention, a detention card is placed on the door, but this does not preclude the possibility of placing barrier or convalescent cards on separate beds inside the room. The following distinction between detention and barriered cases must, however, be observed. All detention or convalescent cases in a given room constitute a single unit, whether the cards are on the beds or on the door; but each bed-barriered case in a room constitutes a separate unit, and only when the barrier card is on the door do all barriered cases in a room constitute a single unit. The following examples illustrate these principles. With a detention card on the door of a room and barrier cards on two beds inside the room, we have three units—one detention and two barriered.

Cards remain posted until the physician in charge orders them removed.

Detention and Barrier Technique.—Detention technique and barrier technique are the same, the object of each being the complete separation of units. The beds of a unit should be six feet distant from the beds of any other unit. Each patient has a bed, a table and a chair. Each unit has its own thermometers, gowns, and other accessories. Any utensil must be properly disinfected before it is used in another unit. The nurse wears a separate gown in each unit and scrubs her hands before passing from one unit to another. Patients in the same unit may mingle with each other, but not with those of any other unit. Toys and other time-passing devices are allowed at the discretion of the nurse, provided there is no interchange between units. Detention and barriered cases use bedpans and urinals instead of the toilet room, except on written order.

Whenever a patient not being treated in a single unit develops a rash, sore throat, sudden rise in temperature, vaginal discharge, or any other suspicious symptom, the nurse in charge must barrier the case at once and telephone the office or notify the physician in charge.

Convalescent technique.—Convalescents are those cases in the main wards who have passed through the detention period. For the most part they are treated in the smaller side rooms. In the latter case they are marked by convalescent cards on door or bed. Convalescent technique is the same as detention and barrier technique (see above) with certain important exceptions. Convalescents in the side rooms may visit the convalescent room during the day-time. All convalescents may associate together, indoors and outdoors, under the nurse's supervision. They may use the toilet and bath room marked "convalescent." They are not allowed to loiter or to touch anything when passing through the corridor.

Out-of-doors technique.—The nurse opens the doors for patients entering or leaving the ward. Older children and adults allowed out of doors without supervision must not mingle with patients outside of their own unit, must not leave the hospital grounds, and must not enter any other building. Infraction of these rules is punished by withdrawal of the outdoor privilege.

Younger children are taken out by a nurse or gowned nursemaid. If they are from more than one unit, she watches that they do not mingle.

Infants are taken out by a gowned nurse, someone opening and closing the doors for her. Infants and children too small to be trusted at a distance from the ward buildings are placed at intervals of six to eight feet in chairs, or on blankets spread on the ground. In any case units must be always kept apart and a nurse must change her gown and wash her hands between different units.

Recipe for Making a Good Nurse

Mix together equal parts of pluck, good health, and well-balanced sympathy; stiffen with energy and soften with the milk of human kindness. Use a first-class training school as a mixer. Add the sweetness of a smile, a little ginger, and generous amounts of tact, humor and unselfishness, with plenty of patience. Pour into the mold of womanhood, time with enthusiasm, finish with a cap, and garnish with ambition.

The sauce of experience is always an improvement to this recipe, which, if followed closely, should be very successful and exceedingly popular.—Alumnae Record, Buffalo General Hospital.

THE SOUL AND BODY OF A HOSPITAL STATISTICAL DEPARTMENT

The Organization, Operation, and Purpose of the Statistical Department of Mount Sinai Hospital, Cleveland—Reasons for Records—Spirit of the Attending Man

By FRANK E. CHAPMAN, Superintendent, and LILLIAN C. FREEDMAN, Medical Statistician, Mount Sinai Hospital, Cleveland

I. The Informing Purpose: By F. E. Chapman

MUCH has been written, and much more has been said, relative to the maintenance of a proper accounting system for the vital work of an institution, or in other words, the keeping of proper medical records. A large percentage of these articles have laid especial emphasis upon the physical machinery necessary to keep such a record, and have forgotten to a large extent any reference to those intangible things that are essential to the securing of case histories, that is, an understanding on the part of the staff of the reason for such records, a willingness on their part to cooperate with the administration to a common end, and a recognition on the part of the administration of the necessity to see that after the record is laboriously made it is put to the use for which it was primarily taken.

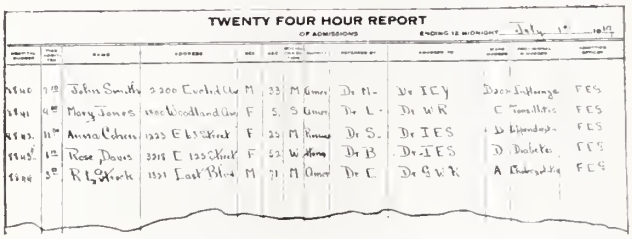

TWENTY FOUR HOUR REPORT
OF ADMISSIONS ENDING 12 MIDNIGHT July 1st 1919

Fig. 1. Twenty-four hour report. Actual measurement of original, 11 by 8½ inches.

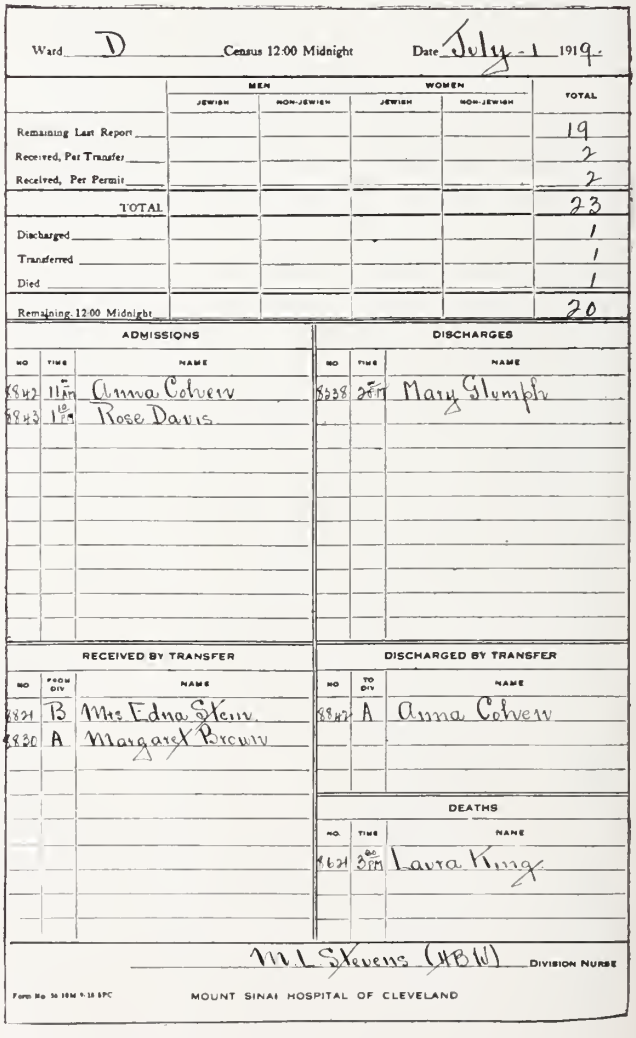
One of the most inspirational talks to which it has ever been my privilege to listen was given at a meeting of business men looking toward the financing of a communal-philanthropic movement. After some little time had been spent in discussing ways and means of this financing, rather a noted divine arose and spoke on the soul of philanthropy, stating that the topics being discussed were of little moment to him; the thing that interested him most was the spirit of the movement. To plagiarize in such a good cause is permissible, and an attempt will be made to visualize for you the spirit of service to the patient that has been paramount at all times in the organization and operation of our record system, and to attempt to show how, from such a spirit on the part of the attending staff, house staff, statistician, and record room, naught but a better medical performance can come.

REASONS FOR RECORDS

Medical records are kept for numerous reasons: first and foremost, of course, for the betterment of the patient's condition; secondly, as an increased facility for the medical man in handling the patient; thirdly, for the purpose of research; and fourthly, for the protection of both the attending man and the hospital.

OBLIGATION FOR RECORD

The task of making a complete record of medical performance is rather an odious one, and one to which the average practicing physician does not lend himself very readily. It is, therefore, necessary that your physician be educated to recognize the absolute need for such a record, and that the records when taken are used to his advantage, in order that he may have demonstrated to him vividly that his labors have not been in


Ward D Census 12:00 Midnight Date July 1 1919

	MEN JEWISH	MEN NON-JEWISH	WOMEN JEWISH	WOMEN NON-JEWISH	TOTAL
Remaining Last Report					19
Received, Per Transfer					2
Received, Per Permit					2
TOTAL					23
Discharged					1
Transferred					1
Died					1
Remaining 12:00 Midnight					20

ADMISSIONS

NO	TIME	NAME
8842	11am	Anna Cohen
8843	1pm	Rose Davis

DISCHARGES

NO	TIME	NAME
8838	2pm	Mary Glumph

RECEIVED BY TRANSFER

NO	FROM DIV	NAME
8821	B	Mrs Edna Stern
8820	A	Margaret Brown

DISCHARGED BY TRANSFER

NO	TO DIV	NAME
8843	A	Anna Cohen

DEATHS

NO	TIME	NAME
8671	3pm	Laura King

M L Stevens (HBW) DIVISION NURSE

Form No 36 10M 9-18 SPC MOUNT SINAI HOSPITAL OF CLEVELAND

Fig. 2. Ward census sheet. Actual measurement of original 6½ by 10 inches.

vain. The obligation for the taking of proper medical records, therefore, is two-fold; one on the part of the attending man to see that the record is made, and one on the part of the administration to establish the machinery for such record-taking, and to provide means for analysis of the records after they have been taken.

ANALYSIS OF RECORDS

A great many administrators have been con-

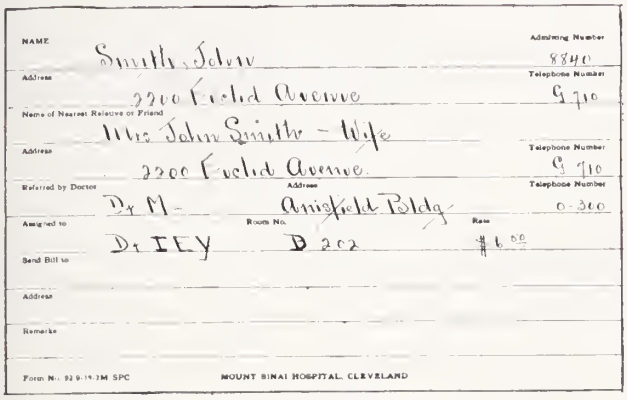

NAME Smith, John
Admitting Number 8340
Address 2200 Euclid Avenue
Telephone Number 9710
Name of Nearest Relative or Friend Mrs John Smith - Wife
Address 2200 Euclid Avenue
Telephone Number 9710
Referred by Doctor Dr M-
Address Amisfield Bldg
Telephone Number 0-300
Assigned to Dr ILY
Room No. D 202
Rate $6.00
Send Bill to
Address
Remarks
Form No. 92 9-14-3M SPC MOUNT SINAI HOSPITAL, CLEVELAND

Fig. 3. Form for notification of admission of patient. Actual measurement of original, 8 by 5 inches.

fronted with the statement by both attending and house men that there can be no good reason for taking histories if the records are filed and never referred to afterward. There is not a single argument that can be advanced refuting this contention. If histories are not checked; if omissions are not called to the attention of attending men; if end-results are not charted, then the mere taking of the records is productive of no good whatever, in fact, it is an added expense without any return.

The attending staff may have the best intentions in the world, but after all, their primary work is to look after the sick, and it should not be incumbent upon them to check up the actual physical taking of histories, and the analysis of end-results as shown by these histories. As a matter of fact, there are few staffs that have in their personnel one who can bring to such an analysis an unprejudiced, impersonal opinion that is absolutely essential. It is not meant that they should be relieved in any sense of the word from their obligation of seeing that histories are properly written, but the physical labor entailed in doing the work should be taken from their shoulders.

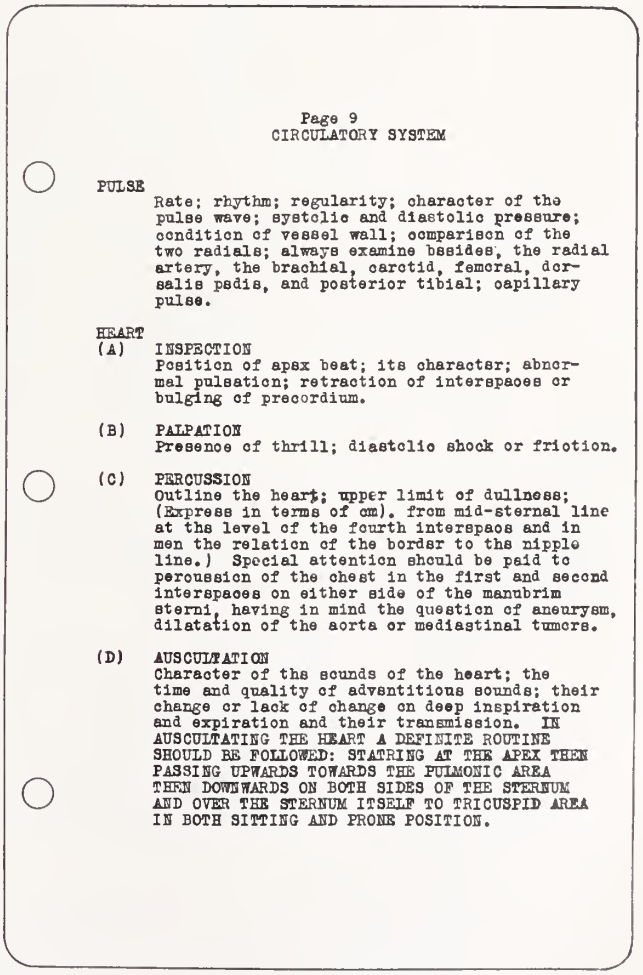
SPIRIT OF THE ATTENDING MAN

A thorough understanding of the end in view is very essential in any venture; this is especially true in the keeping of medical records. Your attending staff must be thoroughly imbued with the reason for the keeping of records, and be made familiar at all times with the end-results developed from a study of these records. Therefore, to my mind, one of the most important things is the establishment of the office of record clerk or statistician, as may seem best to term the position.

It must be clearly understood that this record clerk or statistician is not to be considered in any sense of the word as a judge of medical performance. It is his or her duty merely to set up in statistical form the facts developed by an analysis of the medical performance, and to present these facts in such form that they can be of maximum benefit to the organization as a whole. Certain definite routine procedure should be followed, and this procedure applied to large and small alike; the director of the service being under the same scrutiny as the junior assistant in that service. Facts developed by such an analysis should not be construed as a personal reflection, but rather as an attempt on the part of the administration to call omissions to the attention of the individual in an attempt to improve the performance of the whole.

HISTORY MEETINGS

With such a spirit prevailing, it is rather interesting to watch a history meeting at which


Page 9
CIRCULATORY SYSTEM

PULSE
Rate; rhythm; regularity; character of the pulse wave; systolic and diastolic pressure; condition of vessel wall; comparison of the two radials; always examine besides, the radial artery, the brachial, carotid, femoral, dorsalis pedis, and posterior tibial; capillary pulse.

HEART
(A) INSPECTION
Position of apex beat; its character; abnormal pulsation; retraction of interspaces or bulging of precordium.

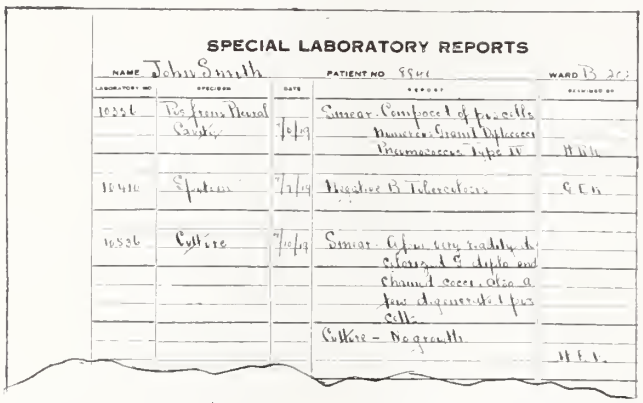
(B) PALPATION
Presence of thrill; diastolic shock or friction.

(C) PERCUSSION
Outline the heart; upper limit of dullness; (Express in terms of cm). from mid-sternal line at the level of the fourth interspace and in men the relation of the border to the nipple line.) Special attention should be paid to percussion of the chest in the first and second interspaces on either side of the manubrim sterni, having in mind the question of aneurysm, dilatation of the aorta or mediastinal tumors.

(D) AUSCULTATION
Character of the sounds of the heart; the time and quality of adventitious sounds; their change or lack of change on deep inspiration and expiration and their transmission. IN AUSCULTATING THE HEART A DEFINITE ROUTINE SHOULD BE FOLLOWED: STARTING AT THE APEX THEN PASSING UPWARDS TOWARDS THE PULMONIC AREA THEN DOWNWARDS ON BOTH SIDES OF THE STERNUM AND OVER THE STERNUM ITSELF TO TRICUSPID AREA IN BOTH SITTING AND PRONE POSITION.

Fig. 4. Specimen page of history form. Actual measurement of original, 5½ by 7 inches.

the statistician presides. These meetings are attended by the resident staff, and at various times, members of the attending staff. It is also interesting to note the reaction when certain omissions in the history are charted against the individual attending man, to see the attempts on the part of


SPECIAL LABORATORY REPORTS

NAME John Smith PATIENT NO 8546 WARD B 20

LABORATORY NO	SPECIMEN	DATE	REPORT	REPORTED BY
10241	Pus from Nasal Cavity	7/6/19	Smear: Composed of pus cells, numerous Gram Diplococci Pneumococcus Type IV	H.B.W.
10410	Sputum	7/7/19	Negative B. Tuberculosis	G.E.R.
10536	Culture	7/8/19	Smear: Of mucoid material shows G. Staph. and G. diplo and Strept. occas. also a few degenerated pus cells.	
			Culture - No growth	H.E.V.

Fig. 5. Special laboratory sheet. Actual measurement of original, 8½ by 11 inches.

the individual to justify such omissions, and to attempt to correct a statistical record that to his mind is not proved on the medical record. The comparative statement of performance is watched very closely indeed, and there is very seldom a monthly report submitted to them that some member of the attending staff does not attempt to have a fact incorrectly stated, changed, not because he is trying to improve his record alone, but because he believes the written record of the hospital does not state the true conditions. After all, the history must be the basis upon which all performance is recorded. It is at these meetings that all diagnoses are finally approved and classified, in order that they may be filed. The interest of the staff in these meetings is very keen, and has grown keener from time to time, as the spirit of the service that we are attempting to perform has been more thoroughly imbued in the minds of the men.

That we are fortunate in having so close an understanding between our record room and the staff goes without saying. This close understanding is absolutely essential to effect the type of performance desired.

In the following pages has been outlined in detail the machinery that the administration has established for the taking of these records. This detail is interesting insofar as it shows the pains that we have taken to secure this performance. That the end has justified the means I think none who are acquainted with the conditions in this institution will gainsay.

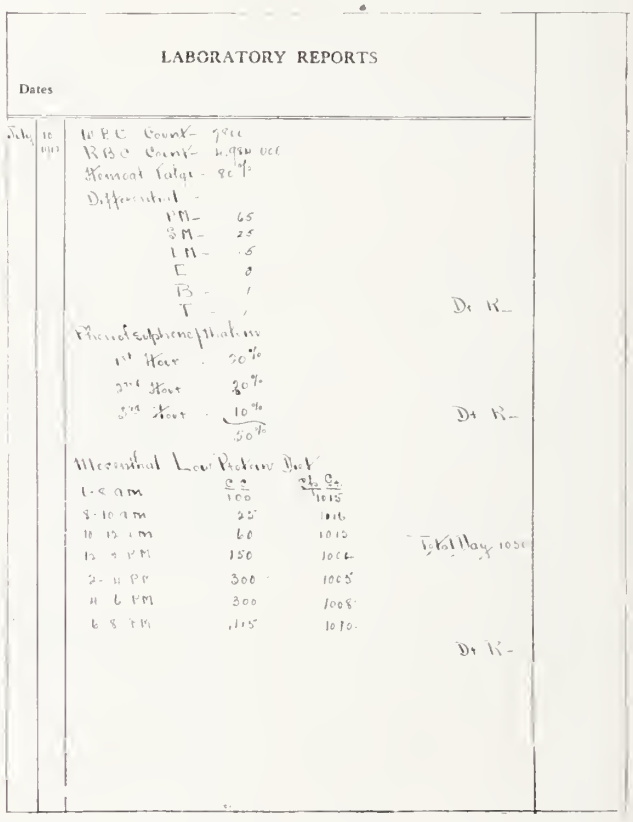
II. The System Followed: By L. C. Freedman

ADMISSION OF PATIENTS

On entrance into the institution, the patient is sent into the admitting room, where the following routine of admission is performed:

The patient's name, address, telephone number, name of nearest relative, physician, and similar primary information is obtained; an admission number (issued in chronological order), ward, and intern is assigned to the case. All this information is incorporated in the Form 62, which is sent into the main office, immediately upon the admission of the patient.

Patient's name, address, physician, and intern are entered in the patients' register book, and also on the twenty-four-hour report, the latter being


LABORATORY REPORTS

Dates

July 10 1919

W.B.C. Count - 7800
R.B.C. Count - 4,950,000
Hemoglobin Value - 80%
Differential -
PM - 65
SM - 25
LM - 6
E - 0
B - 1
T - 1
Dr K.
Phenolsulphonephthalein
1st Hour 30%
2nd Hour 30%
3rd Hour 10%
50%
Dr K.
Microscopical Examination of Urine
	c.c.	Sp. Gr.
6-8 a.m.	100	1015
8-10 a.m.	25	1016
10-12 a.m.	60	1012
12-2 P.M.	150	1004
2-4 P.M.	300	1005
4-6 P.M.	300	1008
6-8 P.M.	115	1010

Dr K.

Fig. 6. Laboratory report sheet. Actual measurement of original, 8¼ by 10⅝ inches.

completed at midnight daily, and issued in duplicate, one copy being sent into the main office, and the second copy into the record room.

A history folder, incorporating the above-mentioned information, is filled out for each patient, and sent to the ward with the patient.

Before being sent to the ward, the patient is bathed, his temperature, pulse and respiration are taken, as well as nose and throat cultures. On female patients, vaginal smears are also made.

In the event the patient has a reservation for a private room, the admitting officer takes the patient into the room and there obtains the history. The routine procedure of admission is performed in the patient's room instead of in the admitting room.

For the admission of a newborn, a similar procedure is followed as for a private-room patient.

ADMISSION OF PATIENT ON WARD

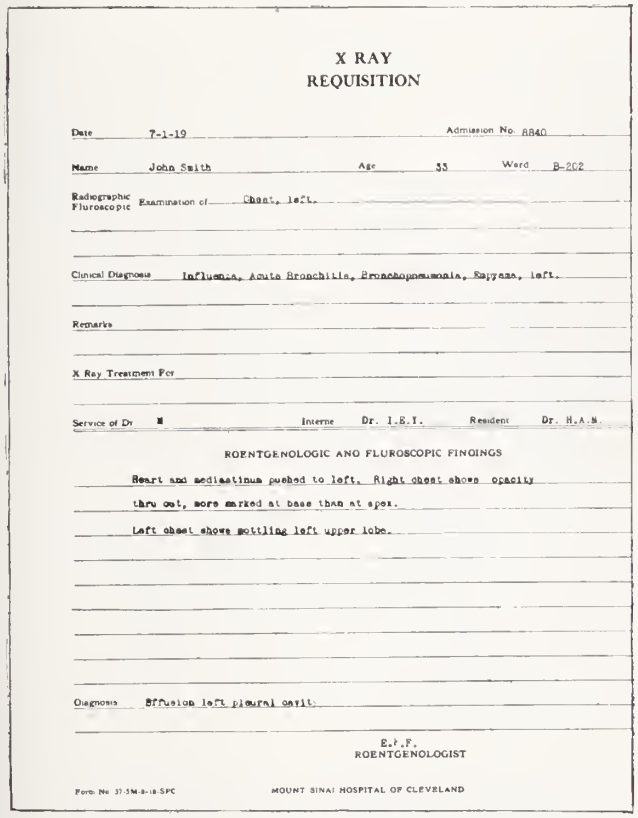
When admitted to the ward, the patient is assigned a bed. The resident and intern are notified of the patient's admission, and after the patient has been visited, orders are left for treatment.

From the history folder, which accompanies the patient to the ward, the history sheets for the chart are made up.

The ward census is kept up daily, in duplicate, showing the number of admissions, transfers, discharges and deaths; one copy of the census is sent into the main office, and the second copy is sent into the record room.

OFFICE WORK

The main office is notified of the admission of a patient by Form 62, made out in the admitting



X RAY
REQUISITION

Date 7-1-19 Admission No. 8840

Name John Smith Age 33 Ward B-202

Radiographic Fluroscopic Examination of Chest, left.

Clinical Diagnosis Influenza, Acute Bronchitis, Bronchopneumonia, Empyema, left.

Remarks

X Ray Treatment For

Service of Dr M Interne Dr. I.S.I. Resident Dr. H.A.M.

ROENTGENOLOGIC AND FLUROSCOPIC FINDINGS

Heart and mediastinum pushed to left. Right chest shows opacity thru out, more marked at base than at apex.

Left chest shows mottling left upper lobe.

Diagnosis Effusion left pleural cavit.

E.F.F.
ROENTGENOLOGIST

Form No 37-3M-8-18-SPC MOUNT SINAI HOSPITAL OF CLEVELAND

Fig. 7. X-ray requisition. Actual measurement of original, $8\frac{3}{8}$ by 11 inches.

room. The information contained on this form is entered on the telephone operator's board for reference.

From the daily ward census, the registrar keeps the patient's register board up to date, which shows the patient's name, room number or ward, physician, date of admission and financial status.

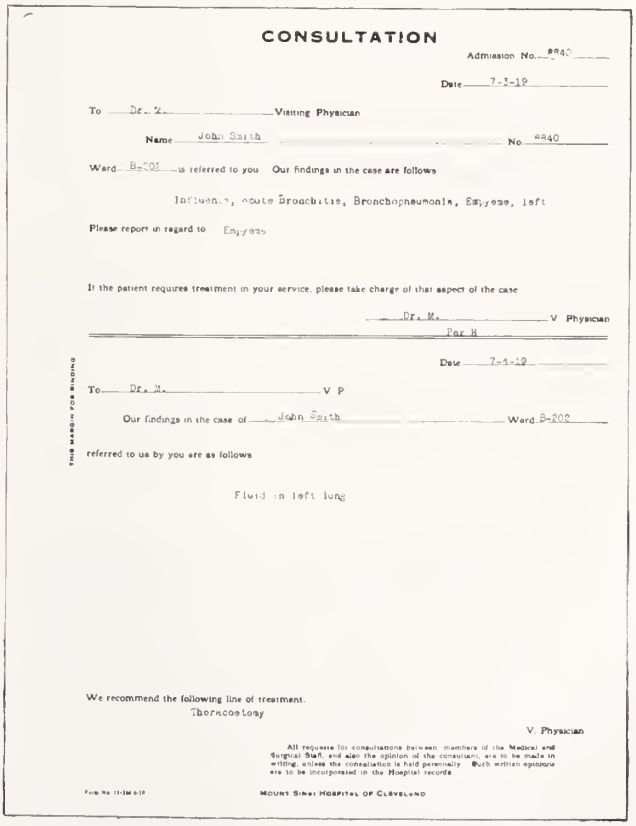
All reservations for private or semi-private rooms are made by the attending physician through the registrar. Reservations for the ward beds are made through the registrar, after being approved by the social service department, except in case of emergency, when the patient is immediately admitted into the institution, and investigation made on the following day by the social service department. Ward rates are established, but may be modified by the social worker, after the case is investigated; the rates varying in each case according to the financial condition of the patient. Private and semi-private room rates remain the same in all cases.

From the Form 62, a ledger card is made up in the main office for each admission, and sent into the accounting department, where all charges are properly entered, and all bills for hospital care are rendered weekly.

EXAMINING OF PATIENTS

Within twenty-four hours after admission, a complete history is taken, a physical examination performed, and this information dictated according to the requirements of our history forms, on the dictating machines by the intern in charge of the case. These records are then sent to the record room to be transcribed.

The provisional diagnosis is made, wherever possible, upon admission of the patient, but in any event, the provisional diagnosis must be made within forty-eight hours after admission of the patient. In medical cases, the final diagnosis



CONSULTATION

Admission No. 8840

Date 7-1-19

To Dr. X. Visiting Physician

Name John Smith No. 8840

Ward B-202 is referred to you Our findings in the case are follows

Influenza, Acute Bronchitis, Bronchopneumonia, Empyema, left

Please report in regard to Empyema

If the patient requires treatment in your service, please take charge of that aspect of the case

Dr. M. V Physician
Per H

THIS BOARD IS FOR BINDING

Date 7-1-19

To Dr. M. V P

Our findings in the case of John Smith Ward B-202

referred to us by you are as follows

Fluid in left lung

We recommend the following line of treatment.
Thoracostomy

V. Physician

All requests for consultations between members of the Medical and Surgical Staff, and also the opinion of the consultant, are to be made in writing, unless the consultation is held personally. Such written opinions are to be incorporated in the Hospital records.

Form No 11-3M-8-18 MOUNT SINAI HOSPITAL OF CLEVELAND

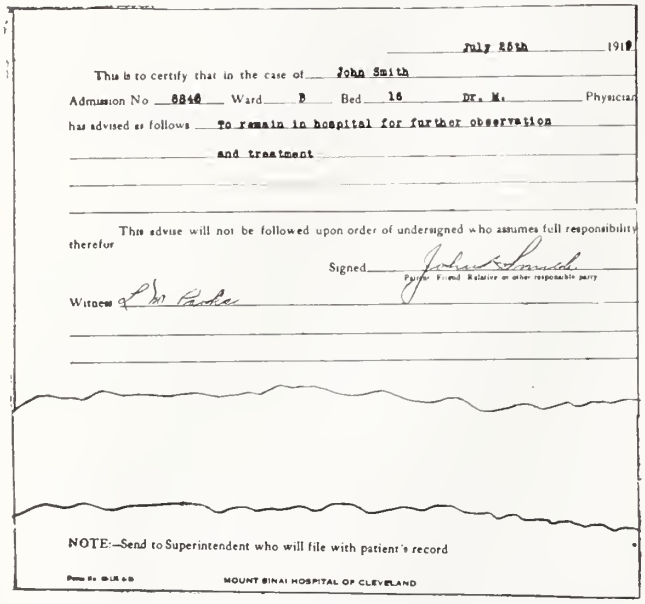
Fig. 8. Consultation form. Actual measurement of original, $8\frac{1}{2}$x11 inches.

should be made within a reasonable time after admission. The pathological findings determine the final diagnosis in surgical cases.

ROUTINE

Daily observation notes are made in medical cases, during the ward rounds. These notations are generally dictated by the visiting staff to the interns.

In surgical cases, the operative procedure is


July 25th 1919

This is to certify that in the case of John Smith

Admission No 8840 Ward B Bed 16 Dr. M. Physician

has advised as follows to remain in hospital for further observation and treatment

This advise will not be followed upon order of undersigned who assumes full responsibility therefor

Signed John Smith
Patient, Friend, Relative or other responsible party

Witness Dr Parker

NOTE:—Send to Superintendent who will file with patient's record

MOUNT SINAI HOSPITAL OF CLEVELAND

Fig. 9. Release form. Actual measurement of original, 8½ by 11 inches.

dictated by the first assistant, and transcribed in the record room. Post-operative notes concerning the patient's condition, removal of drains, packs, clips, sutures, condition of wound, and possible infections, are noted by the intern.

All routine laboratory work is charted by a laboratory assistant, on special laboratory report sheets. All surgical pathology is done by the pathologist or his assistants, and is charted by a member of the laboratory personnel. Special laboratory work, including gastric analyses, Mosenthal tests, blood counts, differential counts, kidney functional tests, is done by the intern and charted on the routine laboratory report sheet by the intern.

When an x-ray of a patient is desired, a requisition made out by either the attending physician or intern, is sent to the x-ray office, where the routine performance for x-ray of the patient is carried out. After the x-ray is taken, the report is charted by the roentgenologist and sent to the ward to be incorporated in the patient's chart.

Consultations, when indicated, are requested by the various services, and replies noted by the physician consulted, within twenty-four hours.

Ward rounds are made daily by the visiting and house staff of each individual service. On Sunday mornings, joint ward rounds of all services are made by the house and visiting staff.

Discharge notes are written either by the visiting physician or the intern, before the patient is permitted to leave the institution. In the event the patient desires to leave before being officially discharged, it is necessary that a release be signed, which relieves the hospital of any further responsibility in connection with the condition of such patient.

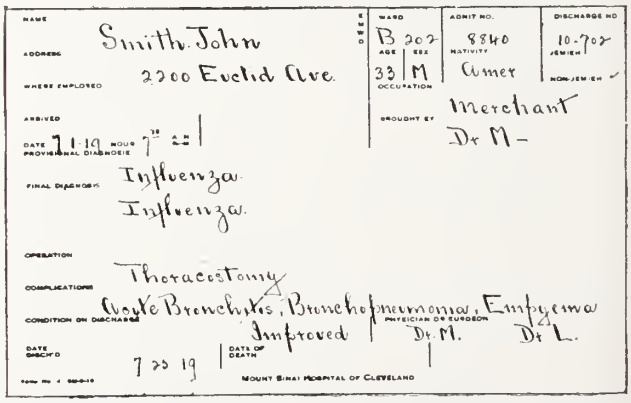
RECORD-ROOM WORK

All dictated cylinders, including histories and physical examinations of patients, operative procedures, surgical pathology, histology, and autopsies are sent into the record room to be transcribed on the transcribing machines.

After being transcribed, the completed histories are checked by the statistician or by the intern, and sent to the wards within forty-eight hours after the admission of the patient.

Bi-weekly, ward rounds are made by the statistician, in order to check the patients' charts on the wards, that is, to see that histories and physical examinations are promptly taken and dictated on all patients admitted; routine work including admission, pre-operative, post-operative, routine, and discharge urinalyses; daily notes concerning the patient's condition charted; consultations accepted, and in short, to see that the patient is given every possible advantage of the facilities offered by our methods of procedure.

Daily, a copy of the ward census and twenty-four-hour report is received in the record room.


NAME Smith John

ADDRESS 2200 Euclid Ave.

WHERE EMPLOYED

ARRIVED

DATE 7.1.19 HOUR 7" a.m. PROVISIONAL DIAGNOSIS Influenza

FINAL DIAGNOSIS Influenza

OPERATION Thoracostomy

COMPLICATIONS

CONDITION ON DISCHARGE Acute Bronchitis, Bronchopneumonia, Empyema Improved

DATE DISCH'D 7 22 19

WARD B 202 AGE 33 SEX M OCCUPATION Merchant

ADMIT NO. 8840 NATIVITY Amer PHYSICIAN OR SURGEON Dr. M.

DISCHARGE NO 10-702 JEWISH NON-JEWISH

BROUGHT BY

DATE OF DEATH Dr. L.

MOUNT SINAI HOSPITAL OF CLEVELAND

Fig. 10. Index card as filled in on admission. Actual measurement of original, 8 by 5 inches.

An index card is filled out for each admission in accordance with the twenty-four-hour report. Contained on these cards is the primary information concerning the patient, including the name, address, ward, admission number, social condition, sex, occupation, date and hour of admission, physician, and provisional diagnosis. These cards

are then filed alphabetically in the "current list of patients." All cards of patients discharged or expired are taken from the "current list of patients," discharge date noted, and filed in the "incomplete file."

The charts of the patients discharged or expired are received daily in the record room, and for each patient discharged, there is one chart received, and one corresponding index card put into the "incomplete file."

On Tuesday of each week, a history meeting, attended by the residents, interns, and medical statistician, is held for the purpose of completing

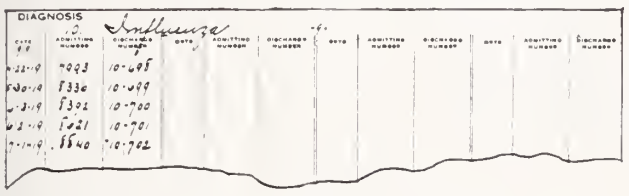


Fig. 11. Diagnosis card. Actual measurement of original, 8 by 5 inches.

the histories of patients discharged during the preceding week (which histories have been in the "incomplete file") checking the diagnoses, and signing of the histories. The histories are then turned over to the statistician, ready for classification, entry, analysis, and filing.

METHOD OF RECORDING HISTORIES

The International Classification of Diseases was adopted by us, because it is more universally used than any other nomenclature, also because it is more elastic and offers the greatest possibilities for statistical purposes. This nomenclature was originally compiled by a committee comprised of representatives of many nations, for the purpose of establishing a universal nomenclature for vital statistical purposes. Since the object of statistics kept for communal or national purposes is unlike that of institutional records, it was therefore necessary that this classification be revised in several respects; for instance, little attention is given to any surgical performance, which is of vital interest to us. In order to record this information, we originated an "operative classification." Of primary interest for ordinary statistics is the manner in which a patient is injured, rather than the injury sustained. It is our desire, however, to record both the traumatism and the resulting injuries. We are as much interested in the record that a patient received a fractured skull as in the fact that he was injured by an automobile. We have, therefore, in addition to the original traumatic file, arranged an "injury classification," which covers all possible injuries, and is classified anatomically. Also, in the original diagnosis classification, there were "diagnosis" cards desired by the state boards of health, which would be of no particular value as institutional records, and vice versa, these were accordingly modified and revised to meet our needs. In this manner, we succeed in keeping an acurate record of every possible performance, both medical and surgical, which adds greatly to the value of our statistics.

CLASSIFICATION OF HISTORIES

Histories are classified and filed according to their final diagnoses. The discharge number, determined by the final diagnosis, is assigned from the nomenclature, and a serial number is given, determined by the number of patients previously discharged with a similar final diagnosis; for instance, "influenza," according to the nomenclature is No. 10. Assuming that we have previously discharged 701 influenza cases, the next patient discharged with a final diagnosis of influenza, will be assigned the discharge number of 10-702.

Entries are then made on the diagnosis, complication, operative and injury classification cards. These entries consist of the date of admission, admission number and the discharge number. No name is entered on any of these cards, as both the admission and discharge numbers give the key to the name.

Under each disease index card, there are two entry cards, viz: "diagnosis" card, and a "complication" card. Only one entry for each patient discharged is made on the "diagnosis" card, whereas there may be any number of complications entered on the various "complication" cards. In this way, the number of entries on the "diagnosis" cards of each individual disease, equals the number of patients discharged. The "complication" card is used for all complications indicated,

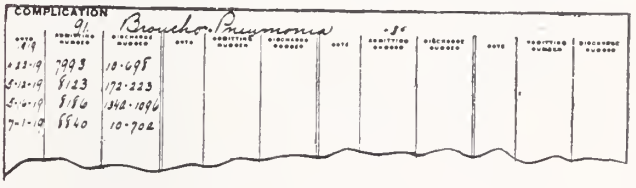


Fig. 12. Complication card. Actual measurement of original, 8 by 5 inches.

for instance, if the patient discharged with the final diagnosis of influenza, and assigned the discharge number 10-702 (as explained above), had acute bronchitis, bronchopneumonia, and empyema as complications of the influenza, in addition to a thoracostomy for the empyema, the "complication" cards under each of the complications will bear a similar entry to the one on the "diagnosis" card of influenza, thus serving as a complete cross-reference. The same entry is also made on the operative classification cards. The number of entries on a "diagnosis" card and

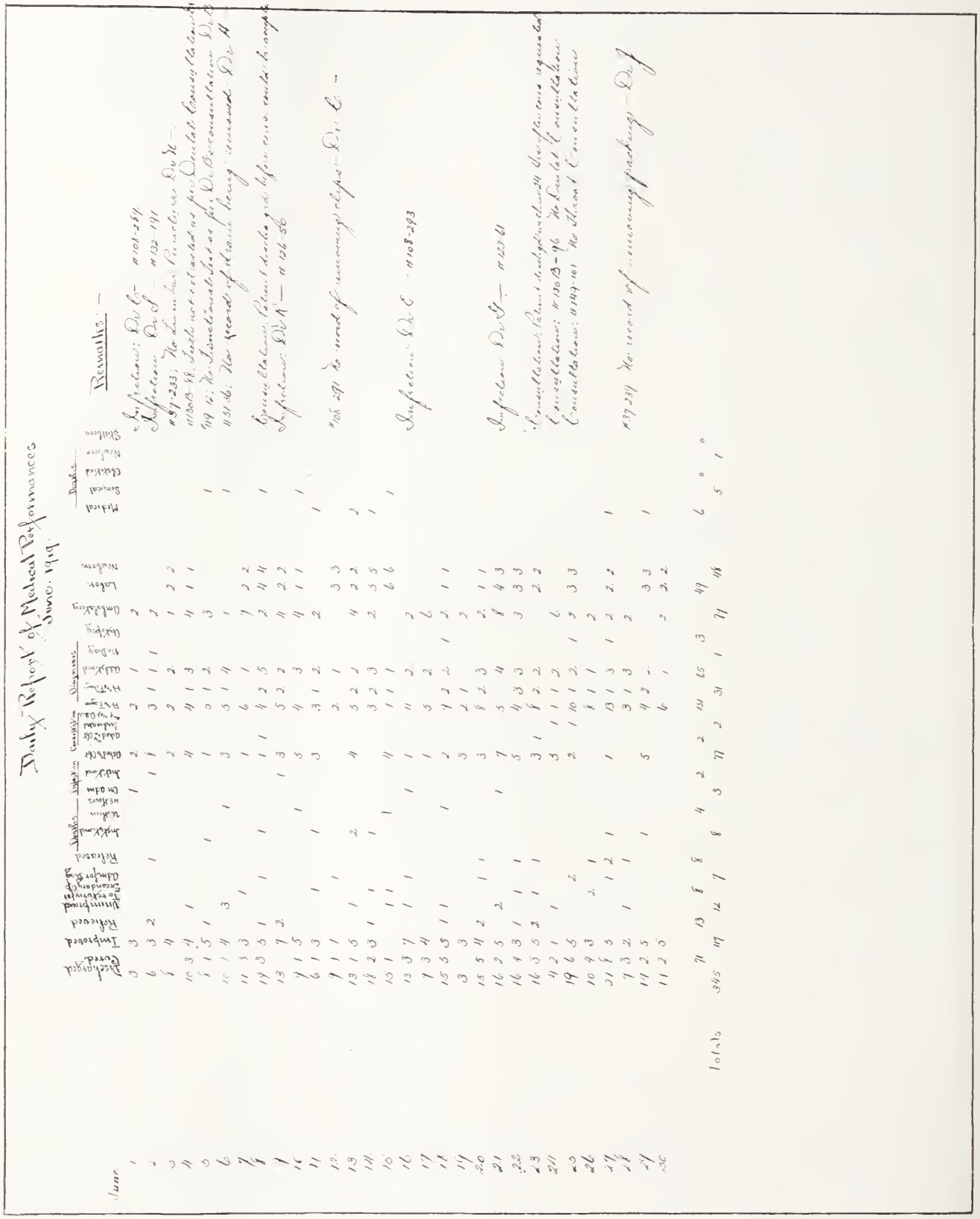


Fig. 13. Daily report of medical performances. Actual measurement of original 16¾ by 13⅞ inches.

"complication" card under each individual disease, equals the number of patients treated for the disease, regardless of whether treated as a primary or secondary condition; for instance, if a patient is discharged with a final diagnosis of acute tonsillitis, complicated by influenza, the "diagnosis" card for acute tonsillitis would be used, and the "complication" card for influenza. Previously discharged, we have assumed 702 cases of influenza, treated as a primary condition, plus

this case treated for influenza as a complication, would give a total of 703 cases of influenza treated.

The operations are entered in the operative classification, each individual operation being classified individually, regardless of whether all the operations were done at one time or at different stages. If a hysterectomy, salpingo-oophorectomy and incidental appendectomy is performed on one patient under one anesthesia, nevertheless, an entry is made on each individual operative card.

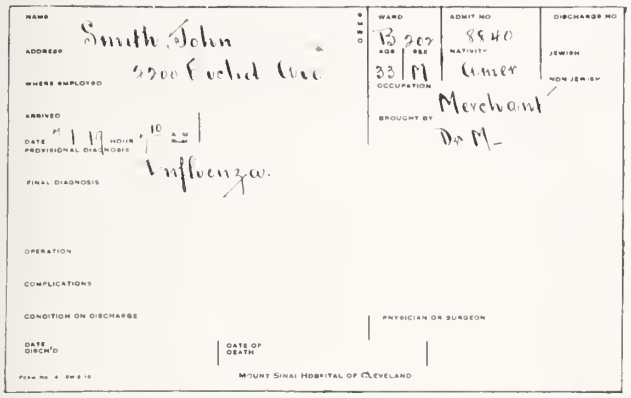


Fig. 14. Completed alphabetical index card. Actual measurement of original, 8 by 5 inches.

The discharge number, final diagnosis, operations performed, and the discharge condition, are entered on the alphabetical index card in the "incomplete file," for each individual patient. These cards are then filed alphabetically in the permanent file. In the patient's register book, kept in the admitting room, the final diagnosis, discharge number and date are entered in order to complete the record there. All the foregoing entries having been completed, the histories are ready for analysis.

ANALYSIS OF HISTORIES

In analyzing our histories, an attempt is made to obtain a true record of the medical performance. In order to obtain this information, it is necessary to check each history individually, and chart any possible omissions of performance. The chart must first be complete as to history, physical examination, daily notes, operation, post-operative notes, urinalyses, laboratory work, pathology, and bedside notes. Should any portion of the chart be omitted, it is immediately checked up and called to the attention of the doctor. If an intern fails to note the fact that a drain was removed, this information is charted on the visiting physician's card as a failure of performance. If there is no surgical pathology reported, this is also charted against the visiting physician. This is of particular value as is shown by the card of one surgeon which shows three dilatation and curettages performed without any surgical pathology to indicate that they were legal. This of course, was immediately checked up. If any consultations are not accepted, or if they are indicated and not requested, or advice given in a consultation not followed, that is all charted. Particular attention is given to the source of infections in surgical cases.

A summary of the medical performance is made daily, which indicates the number of patients discharged, and their condition on discharge. The number of provisional and final diagnoses which agree, disagree, additional or no final diagnosis. The number of labor and newborn cases, ambulatories, deaths, consultations, infections, whether on admission or institutional, and autopsies are all noted. From this daily record, a monthly report of medical performance is compiled and submitted to the visiting staff and resident staff for their own information.

The histories are then clamped and filed, each history being clamped individually, and not bound.

Our histories are filed serially, according to the final diagnosis. In this way, all cases of a like final diagnosis are filed together, that is, all No. 10's (No. 10, as explained, is influenza), are filed together beginning with 10-1 and filed serially to 10-702, so that in order to ascertain the next discharge number, it is merely necessary to look up

MOUNT SINAI HOSPITAL OF CLEVELAND, OHIO.
ANALYSIS OF MEDICAL PERFORMANCE, JUNE, 1919.

Cured		71	Diagnosis.	
Improved		117	Prov. & Final Agree	151
Relieved		13	" " " disagree	31
Unimproved		12	Additional diagnosis	65
To return for Secondary Oper.		8	No diagnosis	1
Admitted for Diagnosis		7	Labor	49
Deaths within 48 Hrs.		4	Newborn	48
Deaths Institutional		8	Total Discharged	345
Released		6		
Labor		49	Ambulatory Cases	79
Newborn		48		
Total Discharged		345	Infections.	
			Institutional	2
Causes of Death:			On admission	3
Peritonitis	1 (W-1)		(M-22)	
Fractured Skull	2 (S-22)		Consultations.	
Adenoma of Prostate	1 (S-22)		Asked & Obtained	77
Perforated Intestines	1 (S-26)		Asked, not Obtained	2
Diabetes	1 (M-4)		Indicated, not Asked	2
Bichloride Poisoning	1 (M-4)			
Acute Miliary TBC.	1 (M-4)		Autopsies	3
Meningitis, pneumococcous	1 (M-4)			
Newborn,	1 (W-23)		Deaths.	
Pumonary TBC.	1 (M-4)		Medical	6
Brain abscess	1 (W-31)		Surgical	5
	12		Obstetrical	0
			Newborn	1
Unimproved			Stillborn	0
Fistula in Ano	1 (S-22)		Total	12
Carcinoma, stomach	1 (D-3) Inop.			
Chr. Interstitial Neph.	1 (M-4)			
Malignancy, retroperiton	1 (S-22)			
Mitral Insufficiency	1 (M-4) Refused treatment			
Carcinoma, Liver	1 (S-22)			
Friedreich's ataxia	1 (Or-11)			
Chronic arthritis	1 (M-4) Refused treatment			
Tuberculosis	1 (M-4) Transferred to Tuberculosis Hosp			
Syphilis	2 (M-4 & D-5) One case referred to Night Clinic			
Carcinoma, rectum	1 (S-22)			
	12			

Fig. 15. Monthly analysis of medical performances. Actual measurement of original, 8⅜ by 11 inches.

the last serial number under any individual disease classification. The purpose of this method of filing histories is that it eliminates the necessity of searching through the entire files for histories of a like nature, should our staff desire the histories for research work.

AMBULATORY CASES

Cases coming into the institution for treatment of any kind, and not being assigned to a room or ward, are called "ambulatory" cases.

Admission numbers are assigned "ambulatory" cases the first time admitted. Subsequent admissions retain the primary admission number, and are entered each time on the twenty-four-hour report.

History folders are made out on the first admission, and operative procedures dictated for each admission and put into the one folder according to date.

The routine entries are made the first time the patient is admitted, that is, alphabetical index card, "diagnosis" and operative classification card. For subsequent admissions, the same admission and discharge number, alphabetical index card and "diagnosis" card is used. However, the operation performed on each admission is entered individually on the "operative" classification card, thus giving the surgery credit for their surgical performance, and at the same time putting no additional entries on the "diagnosis" cards, as this is considered the same patient as on previous admission, and the object of our "diagnosis" cards is to obtain the number of patients treated under each diagnosis, and not the number of treatments made.

To cite an example: if A is admitted as an "ambulatory" case to have casts applied for club feet, an entry is made on the "diagnosis" card for "club feet" and on the operative card for "manipulation and cast for club feet." If the patient is admitted a second time for removal and reapplication of casts, an entry is made only on the operative card. Should an entry be made on the "diagnosis" card for each admission of the same "club foot" case, our records would not show the number of cases treated for "club feet," but the number of treatments made.

The alphabetical index cards are kept in what is called the "ambulatory" file until the end of each year, when they are filed in the permanent alphabetical file, and new numbers assigned for the new year.

MORTALITY

In order to facilitate the compilation of an annual report, all entries for patients expired are made in red ink. In this way, when obtaining the statistics annually, it is not necessary to go through the charts to figure the motality rate. This is also of value in obtaining the mortality rate of any individual disease.

EFFICIENCY IN TUBERCULOSIS SANATORIUM ADMINISTRATION

Cooperation Between Trustees and Superintendent, Elimination of Friction, Sufficient Funds for Equipment and Maintenance, and Laws Governing the Control of Tuberculosis Patients, Important Factors

By HERBERT F. GAMMONS, M.D., Superintendent Woodlawn Sanatorium, Dallas, Texas

BRIEFLY stated, the object of a tuberculosis sanatorium is to teach the patient how to live so that he will not succumb to the disease or infect others.

The prevailing opinion, especially among the laity, is that sanatoriums in a great many instances are for purposes of isolation; that a patient who is far advanced and practically moribund should be shipped off to a sanatorium so that he will not infect his associates. They do not realize that this advanced case has already infected every one around, and that, from a standpoint of efficiency, it is the worst possible thing to send the patient to a sanatorium.

Unfortunately, a great many of the trustees of sanatoriums are of the opinion that far-advanced cases should be sent to a sanatorium and, as many of them are laymen, they do not understand the medical side of this big question.

So the first step to take in promoting efficiency in a sanatorium is to have an understanding as to whether the sanatorium in question is to have for its object the isolation of the patient as a focus of infection, or whether it is to be a place for patients to get better and to receive instruction dealing with their lives after leaving the sanatorium. There are without doubt too many isolation sanatoriums, and far too few institutions for the treatment and instruction of early curable cases.

The laws governing the appointment and the length of the term of office of trustees and superintendent are often the cause, indirectly, of inefficiency in sanatoriums. Many trustees have been

appointed on purely political grounds, and in a great many instances the superintendent has received his appointment through a similar source. I do not wish to minimize the good work done by some of these trustees and superintendents so appointed. On the other hand, the harm done by others can not be too severely criticised. A well-trained and capable superintendent, if hampered by a board of trustees who are politically appointed or ignorant of the disease, has very little opportunity to run a sanatorium efficiently.

Laws governing the control of patients in a sanatorium or after they leave are necessary. It is not always a good idea to discharge a patient who does not obey the rules. Some other method of handling these cases similar to that adopted by the Iowa legislature should be used in every state. Allowing patients to become far advanced before entering the institution, spending thousands of dollars to get them on their feet, permitting them to go out and do as they please, and then to return in a few months to die, can scarcely be termed efficiency. A patient must be made to take care of himself and his associates, and laws are absolutely necessary before this will be done.

The length of time a patient is allowed to remain in a sanatorium often determines whether the sanatorium has been efficient. If a patient goes to a sanatorium, stays six months or a year, then goes home and very soon breaks down, when by a little longer stay at the sanatorium he would have been practically cured, the sanatorium has not been efficient. On the other hand, if patients feel that they can stay as long as they please, in many instances they will not try to get well. Patients who are permitted to go back to a sanatorium time and again do not consider taking the treatment very seriously. They know that they can go to work when they feel like it, and, if they break down, they can return to the sanatorium.

The feeding question in a sanatorium is very important. While it should be the policy of all institutions to be as economical as possible, the superintendent who tries to keep his *per capita* down to a certain figure, regardless of results, is not efficient. Tuberculosis patients need good food, well prepared, and sufficient in quantity. A well-fed patient will not be compelled to remain at the sanatorium as long as one who is not properly fed.

The staff of an institution should be so divided that there will be no friction, and each head of a department should have authority to employ or discharge those in his department. All overlapping of departments should be done away with, as more trouble is caused in institutions on this account than on any other. The different department heads must be competent to perform their respective duties, and furthermore, they must be allowed to do things according to their own ideas as far as possible. It is usually best to have for the department heads people who have worked in similar positions in other institutions. Those who have had tuberculosis and have succeeded in getting the disease under control, are also desirable.

No set of rules can be formulated under which all sanatoriums can be operated. Institutions differ according to the location and the class of patients, and to compel superintendents to manage institutions according to any one set of rules is to promote inefficiency.

The superintendent of a tuberculosis sanatorium should be, preferably, one who has worked up from assistant in some other institution. There are very many competent superintendents, however, who have not worked in institutions previous to their appointments as superintendent; but they have had to work in some instances doubly hard, and they have not had the opportunity to profit by other superintendents' mistakes.

The head of a tuberculosis sanatorium must be a man well trained in the different phases of the tuberculosis question. He must be able to handle patients and help; and he must be kind, but firm. Furthermore, he must not be one who imagines things, but must treat with facts entirely.

More depends from an efficiency point of view upon the qualifications of the superintendent than upon those of any other individual. It is he who must lead the trustees as well as the patients and employees. In addition, he should be the leader in all branches of tuberculosis work in his locality.

To summarize: the way to secure efficiency in a sanatorium is to have:

1. A definite object for the institution.
2. Trustees who know how to cooperate with the superintendent.
3. A superintendent well qualified and invested with the proper authority to allow patients to stay the necessary length of time.
4. A staff so organized that friction is eliminated.
5. The people of the locality in which the institution is located educated on the needs and value of such an institution.
6. Sufficient funds for equipment and maintenance.
7. A suitable location with buildings so constructed that maximum results will be obtained with the minimum expenditure of energy and money.
8. Laws governing the control of tuberculosis patients.

OUT-PATIENT DEPARTMENTS AND SOCIAL SERVICE IN CATHOLIC HOSPITALS IN THE UNITED STATES*

Movement for Development of National Catholic War Council's Reconstruction Plan—Clinical Work and Social Service Incorporated in Training of Nurses

By the REV. JOHN O'GRADY, Associate Professor of Sociology, Catholic University, Washington, D. C.

HOSPITAL social service is not by any means a new institution. In the very early history of the church, special orders were established for the purpose of ministering to the sick in their homes. The principal functions of the confraternities of charity and the daughters of charity founded by St. Vincent de Paul were the care of the sick and the poor in their homes.

"From 1667 until the French Revolution, the hospitals of Paris had their full-fledged social service auxiliaries, including solicitors and contributors of funds, ward visitors, and a staff of home visitors. The first group apparently succeeded in obtaining financial support; the second brought to the sick the material and moral aid of which they had need; while the third group, informed by the second concerning the requirements in each case, made domiciliary visits and advised, directed, and assisted convalescents on their departure from the hospital.

"The whole system was discontinued at the time of the French Revolution, but shortly afterwards it was re-established, first in the Hotel Dieu and then in other hospitals, until finally each hospital once more had its social service organization."[1]

The Catholic sisterhoods which have devoted themselves to hospital work in the United States, unlike their European branches, have, for the most part, felt that the care of the sick in the home was outside of their field. Their work has been primarily institutional. In the European branches of the Sisters of Charity, for example, we find a number of Sisters who devote themselves exclusively to outside work. No provision for such home visitation is found in the constitution of the American branch of the same order.

Before the war, many of the Catholic sisterhoods in the United States were beginning to feel the need of medical social service. At that time, at least eight Catholic hospitals were employing social workers in connection with their out-patient departments, and many others were securing the services of volunteers to follow up patients from the wards and dispensaries. The work of developing medical social service, however, in connection with Catholic hospitals was bound to progress very slowly without an active educational campaign conducted by persons having the confidence of those in charge of the hospitals.

There has always been a considerable amount of out-patient work in connection with Catholic hospitals in the United States. So far as can be learned, about fifty of the largest Catholic hospitals in the United States had dispensaries in operation in November, 1918. The work in these dispensaries was, however, rather poorly organized. In some cases there was no hospital staff, and a corresponding dispensary staff was the exception.

The foregoing is a brief description of medical social service and out-patient departments in Catholic hospitals in the United States prior to November, 1918. At that time the National Catholic War Council, as a part of its reconstruction work, decided to inaugurate a movement for the development of out-patient departments and social service work in connection with Catholic hospitals in the United States.

In inaugurating this movement the Council was actuated by two important considerations: In the first place, it was anxious to see the Catholic hospital in a position where it might be of the greatest assistance to the soldier or his dependents in the way of medical care and advice. Under the Soldiers and Sailors Insurance Act, our wounded men have a right to medical care at government expense. The Bureau of War Risk Insurance, which is charged with the administration of the Act, has confided to the United States Public Health Service the problem of providing medical care for wounded soldiers who are compensation cases. The facilities of the Public Health Service and the Home Service Section of the Red Cross have not been equal to the task. They need the cooperation of all agencies engaged in health work. The thousands of men whose compensation has not yet been settled need care and attention. Even after they have formally become charges of the Bureau of War Risk Insurance, many of the men prefer to go to their own physicians and to private institutions for medical care.

The Catholic War Council endeavored to convince the heads of Catholic hospitals in the more

*Read at the Twenty-first Annual Convention of the American Hospital Association, Cincinnati, September 8-12, 1919.

[1] Goldwater, S. S.; "Who Started Hospital Social Service?" Editorial, The Modern Hospital, Vol. xii, pp. 356 (1919).

important industrial centers that, in order to discharge their duty toward the soldiers and their dependents, they should establish out-patient and social service departments. The Council offered to send experts to the different hospitals in order to show the sisters and doctors how the work should be organized. It also volunteered to place one or more medical social service workers at the disposal of the hospital for a period necessary to insure the success of the work.

The second important consideration influencing the War Council in this movement was the need of making Catholic hospitals more efficient as educational institutions in preventive medicine. The war has shown the American people—in fact, it has shown all peoples—that they have been very negligent in matters of health. We have allowed our children to grow up with remedial defects which make their lives unhappy, undermine their vitality, and impair their economic usefulness. We have permitted them, without medical examination, to enter occupations to which they were not equal. As a result of our neglect of health education, large numbers are unacquainted with the elementary facts of hygiene. Very little has been done to put into practice our knowledge of employment, of proper selection of foodstuffs, and of housing and living conditions as related to the problem of ill-health.

The National Catholic War Council felt that the 557 Catholic hospitals in the United States might be made a powerful factor in the solution of the health problems arising out of the war. Their cooperation was particularly necessary in order to enable Catholic child-caring institutions and parochial schools to make more adequate provision for the medical care of children. Medical examination of school children will scarcely attain its purpose if our hospitals are not equipped with out-patient departments whereby the physical defects brought to light by the medical examination may be remedied. Better results could be obtained in the medical care of children in institutions if organized hospital clinics were available where they might be examined before admission, and to which they might be referred for medical care by institutional physicians.

Between December 1, 1918, and August, 1919, our representatives have conferred with the superintendents of thirty Catholic hospitals in the United States. Of these, thirteen have adopted the Council's plan and have in operation well-organized out-patient and social service departments. Of the remaining fifteen, three have signified their intention of adopting the plan as soon as they are given technical assistance.

Shortly after the opening of its campaign, an old and well established hospital in one of the largest cities on the Atlantic seaboard was approached. After a prolonged discussion the Sister in charge decided that it was impossible for her institution to engage in the work. Another hospital in the same city was then approached. We decided to place at the disposal of the institution for a short period a trained social worker if they would agree to organize their staff both for hospital and out-patient departments. Our offer was accepted and within one month the work was under way. After the superintendent of the first hospital learned of the success of the out-patient and social service departments of the second hospital, she immediately decided to establish similar departments in her own institution. Within the past two months a third hospital in the same city has decided to establish an out-patient and a social service department. During the summer months all three hospitals cooperated in conducting a special course in medical social service for their nurses and others.

The first requisite for good dispensary work is a well-organized and sympathetic staff. Only one of the thirteen hospitals which cooperated with the Catholic War Council had a dispensary staff. Five of the institutions had no staff organization in the hospitals. In these institutions, of course, the first step was to organize a hospital staff. The staff of the dispensary in each case was made coordinate with the hospital staff. The head of each department in the hospital was appointed head of the corresponding department in the dispensary and was held responsible for its general policies. The actual work of each dispensary department was placed in the hands of an associate who was given one or more assistants, according to the needs of the department. A great part of our success in staff organization was due to the able work of Dr. Frederick Rice of Bellevue Hospital, New York, who, throughout the period of the war, was associated with the Surgeon-General's office.

Since the dispensary in each case was an integral part of the hospital, the general problems of dispensary administration were placed in charge of a representative of the hospital superintendent, who generally acts in the capacity of registrar. She admits to the dispensary, directs patients to the proper clinics, refers them to the head of the social service department when, in her judgment, they are social service cases, and keeps a registry of attending physicians.

Modern social welfare implies the placing of a greater number of persons in a position where they will have better access to all the things,

both of body and soul, which may be needful for their welfare, the adjusting of our institutions so that all may have more nearly equal opportunities, and the rendering of necessary services to persons who are unable to obtain these services themselves. It has been our constant endeavor to convince the hospitals that dispensary service is a necessary service. We sought to convince them that it should be free to all who are not in a position to pay for the specfic type of service required. No matter what a man's economic status, the out-patient departments working under our auspices will give him free preliminary examination. This is a duty which we believe the hospitals owe to the public. The individual may be suffering from a disease which makes him a danger to others—and there are few diseases nowadays which are purely an individual concern. We are coming more and more to see that neglect of the first symptoms of ill-health is a serious social concern. It is, therefore, the duty of the hospital to take every step necessary to teach people to take care of their health, and one of the best means of doing this is by the adoption of a liberal policy in providing free medical examination. If more persons are induced to take treatment as a result of these examinations, the physicians will certainly profit in the long run. Free medical examination, however, does not mean that patients who are able to do so should not be required to pay the cost of materials used in the examination.

It has been the general policy in the past to deny dispensary treatment to persons who were receiving more than a living wage. To this general rule exceptions have been made when a person who was receiving little more than a living wage needed very expensive treatment. In estimating a living wage a great number of dispensary superintendents have relied on their own fancy and have paid very little attention to important budgetary studies, with the result that we had almost as many different notions of wage standards as we had dispensary superintendents. We have aimed to convince the dispensary superintendents that a living wage is a changeable quantity.

For the benefit of the social service workers, we have brought up to date the various budgetary studies of wages made before and during the war. The standard which we set up was not, of course, an inflexible one, and the hospitals were given to understand that there were a great many other things to be considered in determining the merits of each individual case.

Medical social service is born of the idea that a trained social worker is capable of supplying the physician with a great many facts in regard to the patient's history, his employment, his home conditions, and his habits of life, which are essential for correct diagnosis, and that she can be of invaluable assistance to the physician in teaching the patient how to carry out his orders.

When social service is first introduced into a hospital, many difficulties must be overcome, especially when its introduction is not the result of a movement within the hospital. The physicians must be convinced of the value and the need of social service. It is not sufficient that they be sympathetic towards the work. They must learn when and how the social worker can assist them. The hospital authorities must also learn to appreciate the practical value of social service. They must realize that the social worker is capable of doing more than obtaining a position for a person out of work.

In the thirteen Catholic hospitals which have established social service during the past eight months, the social worker comes in contact with the dispensary patient in three ways. Her first hope of getting in touch with the cases is through the admission desk. We realize that much more effective work can be done if the admission desk is in charge of a trained social worker. In only two hospitals has this been found possible. In three others we have induced the hospital authorities to place an intern at the admission desk. The interns readily learned to appreciate the value of social service and have avoided much confusion in directing patients to the proper clinic. At first we found that the doctors were very slow in referring patients to the social service department, but after the department had been in operation for two or three months there was a remarkable change in their attitude. In nearly every one of the hospitals, two or more progressive men at the head of departments had a remarkable influence in educating the other physicians in the need of medical social service and its possibilities for the medical profession.

In order to make sure that no cases needing social service are slighted, the social workers, at the end of each day, go over the medical records of all cases admitted to the dispensary during the day.

We have succeeded in having standard record forms introduced into all the social service departments thus far established. These forms were made up after careful study of the forms adopted in all the more important medical social service departments in the United States. We do not claim that they are perfect, but we have done everything possible in order to have them embody the best experience on the subject.

Clinical work and social service should form a part of the training of all nurses at the present time. Without training in these branches their sphere will be very limited. They will not be prepared for work in the fields of public health or industrial nursing, and even in private nursing they will scarcely have the vision necessary for effective work. Training in clinical work has an additional advantage in Catholic hospitals in that the members of the Catholic sisterhoods in these institutions are generally recruited from the training schools. The teaching of social service to the nurses will, therefore, have a tendency to develop a greater sympathy for social service in the Catholic sisterhoods. These thoughts we have endeavored at all times to bring home to the hospitals. As a result of our efforts, work in the clinic and social service department forms a part of the training of nurses in all the institutions with which we have dealt. In three of the institutions special courses in social service have been instituted for the nurses in training.

The time has been too short to gauge with any degree of accuracy the results achieved by the medical social service departments established under our auspices. In fact, the institutions have been so busy with the essentials of organization that they have not yet had time to work out many of the details. In some of the larger cities, like New York, Boston, Washington, Philadelphia, and Chicago, the workers have been compelled to devote a great part of their time to the after-care of the soldier, in cooperation with the Red Cross, United States Public Health Service and the Federal Board for Vocational Education. This immediate and necessary work has prevented them from developing some of the other fields of social service. It may be safely said, however, that the social service departments have created a new vision in the Catholic hospitals. It has made them emphasize more and more preventive and follow-up work.

Medical social service is destined to have a great influence not alone on Catholic hospitals, but on Catholic social work generally. It will be the means of providing more adequate care of the health of children in parochial schools and Catholic child-caring institutions. On our advice one of the most important Catholic dioceses in America has, within the past two months, enacted a ruling that all children about to be admitted to child-caring institutions must have a medical examination in one of the hospital clinics. We have every reason to hope that in the near future other dioceses will follow the example of this one in utilizing the hospital out-patient departments to provide diagnostic and medical treatment for all children under their care.

The ideal which we have set before the Catholic hospital out-patient and social service departments is not the providing of medical relief for those who are unable to pay any medical fee, but rather the providing of specialized medical care for the wage earner at a price which he can afford to pay. The wage earners of our time are shut out from the best things in modern medicine because they are unable to meet the fees of the specialist. Health insurance will not meet the need of the wage earners in this respect under the present system of medical practice. This situation may be met by the organization of evening clinics where the working men may obtain specialized medical care for the payment of a relatively small fee. During the course of the next few months we expect to have a number of evening clinics established in connection with Catholic hospitals. In cooperation with the United States Public Health Service we have already established one such clinic in New York City.

Treating Babies in an Eye Hospital

The ophthalmic experience in the Royal Eye Hospital, Manchester, is very good, and it is also very comprehensive. Venereal disease in the mother frequently results in the eyes of the child being infected when born, and there is a special ward for such babies to accommodate several mothers and their infants. The mother accompanies the baby, so that breast-feeding may be continued. There is also a larger ward for conjunctivitis in infants. Here every child sent in for treatment must be accompanied by someone who is capable of looking after it, usually a relative. In one case, the child was brought in and looked after by its great-grandmother. The nurse in charge of the ward is responsible for the treatment of the babies' eyes only, the child's relatives having to see to its bathing and dressing, the washing of its clothes, and its general care. There is a special day-room set apart for these women.—*The Nursing Mirror, London.*

Special Need of Breast-Feeding for Illegitimate Children

In the report of the deaths of six babies at a Southport Nursing Home, it was shown that the mothers of the children, who were all illegitimate, came into the Home for twelve or fourteen days, and then went out, leaving their children to be looked after by the certified midwife in charge. The coroner's verdict was to the effect that the babies died from mal-assimilation of food, and the midwife emphasized the fact that the children mostly started life as "poor little wrecks." This evidence points most strongly to the need for retaining the mothers for at least a year in such homes, so as to give the children the benefit of breast-feeding. In most of the homes in connection with the Diocesan Councils for Preventive Work the mother-to-be is only received on condition that she remains with the child for a year, paying back by degrees when she gets back to work a certain proportion of the money expended on her.—*The Nursing Mirror.*

CROSSED INFECTIONS AND METHODS FOR PREVENTION*

Experience Has Shown Numerous Essential Conditions for Holding Crossed Infections to a Minimum—Negligence Not Always Responsible—Everlasting Vigilance Fundamental Requisite of Technique

By ARCHIBALD L. HOYNE, M.D., Medical Superintendent, Municipal Contagious Disease Hospital, Department of Health, Chicago

WHEN we speak of a crossed infection having occurred in a hospital, we mean that the patient involved has contracted another disease in addition to the one for which he was admitted. For example, if a child is received at a hospital suffering from scarlet fever and later contracts diphtheria, the latter disease, under such circumstances, is termed a "crossed infection."

Crossed infections are the bane of all contagious disease hospitals, and in respect to certain diseases, such as measles and chickenpox, cannot be absolutely prevented. Nevertheless, much can be done to hold these crossed infections down to a minimum. Before referring to past and present experiences along this line at the Municipal Contagious Disease Hospital, certain other explanations should be made regarding this topic.

In the first place, we all know that wherever a large number of children are assembled, be it in schools, orphan asylums, non-contagious disease hospitals, or similar institutions, outbreaks, particularly of measles or chickenpox, occur from time to time, and no special indignation is aroused because of such unfortunate occurrences. Nevertheless, when a parent hears of his child's contracting measles in a contagious disease hospital, he is up in arms and ready to condemn the institution and all connected with it, together with the city, county, or state which maintains it. Yet, if the average individual will acknowledge that the stamp of inefficiency should not, necessarily, be placed upon the school or children's hospital where a measles outbreak may occur, why is he so ready to censure a similar mishap in a contagious disease hospital where the possibilities for secondary infections are, as a rule, vastly greater?

MANNER OF OCCURRENCE

As already indicated, the average person infers, when crossed infections occur in a contagious disease hospital, that negligence must be responsible. Now, while it cannot be denied that this is possible, yet it is by no means always true.

Assume that a child is sent to a contagious disease hospital suffering from diphtheria, and at the time of admission there are no cases of measles in the institution. The patient is placed in a room where there may be from one to eight or ten other diphtheria patients, or the case may be placed in a cubicle (glass-partitioned room) with one or two other patients suffering from a similar disease. The accommodations depend on the type of hospital. At the end of five or six days this patient breaks out with measles. This is not a crossed infection for which the hospital is in any way responsible, because sufficient time has not elapsed since the child was admitted to have measles develop from any hospital case even if there had been one. It simply means that this patient was exposed to measles a week or ten days before he was sent to the hospital. The hospital had no knoweldge of such a fact, and possibly the family was not aware of it.

There was nothing in the nature of the child's symptoms at the time of admission to suggest that he would develop measles; else he would have been isolated (placed in a room by himself). Nevertheless, measles has been brought into the hospital by the child. What happens? Even though the patient is removed from the room at the earliest appearance of the rash, every other child in that room who has not had measles at some previous time is going to have the disease. And, worse than that, it may spread through the hospital like wildfire if the most stringent precautions are not taken, for measles, to a certain extent, is an air-borne disease. It may pass from one room to another simply by means of a door which happens to be left open, a factor which, ordinarily, would be of little consequence in the case of diphtheria or scarlet fever. Now, as has been said, the first patient who developed measles was not an example of a crossed infection occurring in the hospital because the disease was contracted prior to admission. But any other cases of measles which may follow at fourteen-to-eighteen-day intervals would be crossed infections because, in these instances, the disease would be acquired in the hospital and not outside of it. All that has been said concerning measles applies with equal force to chickenpox.

When the Municipal Contagious Disease Hospital was hastily opened in January, 1917, in order to cope with the outbreak of scarlet fever at that time, the institution was quickly over-crowded.

*From the Octennial Report, Department of Health, Bureau of Hospitals, City of Chicago, 1911-1918, John Dill Robertson, M.D., Commissioner.

The hospital equipment was incomplete, there had not been time to develop a well organized staff of physicians, and the nurses for the most part were not trained in the new line of work which they were undertaking. Consequently, although at the time of opening only scarlet fever patients were to be admitted, it is not strange that many crossed infections occurred. The number of crossed infections seems to have been excessive, and yet there were undoubtedly many exigencies to account for a great part of them.

PREVENTIVE MEASURES EFFECTIVE

In May, 1917, the medical staff was better organized, the necessary institutional equipment was practically complete, and the nurses by that time had had more experience and were better trained in contagious disease work. Furthermore, certain changes were made in the distribution and care of patients, and, as a result, the number of crossed infections rapidly declined. In fact, the greater part of the 1917 crossed infections occurred during the first four months of the year. In 1918, the number of crossed infections showed a marked decrease as compared with the preceding year, and was no higher than might have been expected for a hospital of this character.

In January, 1919, when the present medical superintendent, who, since May, 1917, had been more or less closely associated with the hospital as consultant and more latterly as attending physician, assumed charge, certain measures were inaugurated with the object of reducing crossed infections to a minimum and of placing responsibility for any crossed infection which might occur. It is believed that these efforts were contributory to the results obtained for the first month of 1919 when no crossed infection developed in the hospital, although there was a daily average of approximately two hundred patients.

METHODS OF CONTROL

When a patient enters the Municipal Contagious Disease Hospital for some certain disease he is examined minutely in the receiving room. The mere fact that a patient is brought to the hospital suffering from scarlet fever is no proof whatever that he may not also have diphtheria, or vice versa. A diphtheria patient, when received in the examining room, may be found to have Koplik spots in the mouth, a sure sign of oncoming measles. Included in the examination is the history of past illnesses, which has been provided by the ambulance surgeon, who obtains such information from the patient's family when the ambulance calls for the case. Following the examination in the receiving room, the patient is assigned to the proper floor, according to the disease. If the patient has any suspicious symptoms which make a complete diagnosis uncertain at the time of admission, he is isolated until all questions of doubt are cleared up by subsequent examinations during an observation period.

So far as is possible, two or three children who have never had measles are not placed in the same cubicle. The aim is to have but one child who has not had measles in a cubicle with children who have previously had measles. Should this one develop measles a few days after admittance, no harm will come to the other occupants of the cubicle. Moreover, if the measles patient is isolated sufficiently early—two or three days before the rash appears—crossed infections may be prevented. All measles cases are isolated on the top floor, as a current of air is capable of carrying the contagion of measles upward from one floor to another.

The principles of aseptic nursing are also carried out. This plan is well understood and will not be discussed here. However, it may be emphasized that the hands are one of the greatest agencies in the conveyance of contagious diseases and require a thorough cleansing after every handling of the patient, or, of any contaminated article.

As in the case of other contagious disease hospitals, family physicians are not permitted to treat their patients after they send them here. It is assumed that the patient is sent to a specialized hospital for the purpose of receiving expert care. Likewise, it is reasonable to suppose that a hospital staff which is treating hundreds of contagious disease cases daily is better qualified to care for the patient than the average family physician who may, through a lack of knowledge of medical asepsis and hospital technique, become the source of crossed infections and of disorganization in the hospital routine.

Some new rules have recently been put in force at the hospital which may possibly meet with criticism at first. Among them is one which prohibits the sending of toys, books, food, or packages of any description to patients. This may seem a little harsh, but there are good reasons for excluding every item mentioned. Crossed infections are often introduced by toys or books, and diseases are transmitted by them in the hospital from one patient to another.

The city provides every article for the diet which the patient should have, and all food is of the very best quality. The hospital cannot be responsible for the outcome of cases which are receiving food from without the institution. In

the matter of toys, in addition to the principal objections already enumerated, there is another factor: While the gift of a plaything to one child may afford amusement and shorten the hours, it may fill with longing and make unhappy other children who are not so fortunate in their parentage or friends. So, from this viewpoint alone, the general average of contentment, as well as of safety, is highest when all patients are treated alike—no favors and gifts for some, with discontent and envy for others. In addition, it must be rememmbered that about 85 per cent of the patients in this institution are acutely ill and are in no condition to be amused. And, finally, it should be borne in mind that, while every effort is put forth to make the patients as comfortable and as happy as possible, still the primary objects for which the patients are in the hospital are the treatment of disease and the recovery of health. Consequently, the enforcing of any measure is justifiable which will increase efficiency in gaining these objects.

FACE MASKS

Past experience in the hospital seems to show that the general wearing of face masks by all employees plays a very small part, if any, in the control of crossed infections. It is true, face masks may serve to keep the fingers out of the nose or mouth and thus prevent infection, but for those who know no better, a contagious disease hospital is a poor place of employment. Face masks may be of value, however, when taking cultures, feeding patients, or doing any work in close proximity to the patient's face.

RECORDS OF CROSSED INFECTIONS

In order to keep a close check on crossed infections at the Municipal Contagious Disease Hospital and to place responsibility for their occurrence, a blank form has recently been devised by the medical superintendent. This form consists of a pink slip of paper and calls for the following information: name of patient; disease for which admitted to the hospital; date of admission; disease contracted in hospital with date; name of resident physician making diagnosis of crossed infection; name of hospital physician confirming same; and name of head floor-nurse and floor. The clinical record also shows the name of the physician who originally admitted the case to the hospital. A supply of the blank forms referred to is kept in the desk of the head nurse on each floor. As soon as a crossed infection is reported, one of these forms is filled in and sent at once to the office of the medical superintendent. The medical superintendent immediately makes a personal investigation of the case. He satisfies himself as to the diagnosis and undertakes to place responsibility for the occurrence. He also gives any necessary instructions regarding the procedure to be adopted in checking a spread of the disease.

The crossed infection report spoken of is kept on file by the medical superintendent for future reference. If it is found that crossed infections are notably frequent on a given floor or that they occur among the cases of some particular head nurse in charge, it is at once apparent there is a lack of precaution or a flaw in the nursing technique. Thereupon, steps are taken to correct the defects found. Also, if it is shown that many crossed infections occur among patients admitted by a particular physician, a clew is presented and an endeavor is made to ferret out the trouble and eliminate it.

Everlasting vigilance is necessary in holding down the number of crossed infections in a contagious disease hospital. This is one instance at least where it is an error to wait for trouble. It is imperative to look for trouble, to seek trouble at all times in order that trouble may be checked before it can gain any great headway.

NUMBER OF CROSSED INFECTIONS

The number and per cent of crossed infections occurring at the Municipal Contagious Disease Hospital are shown in the following table[1]:

CROSSED INFECTIONS AT MUNICIPAL CONTAGIOUS DISEASE HOSPITAL (1917-1918)

	1917	Percentage	1918	Percentage	Total
Chickenpox	104	4.3	33	1.2	137
Measles	64	2.7	45	1.7	109
Scarlet fever	14	.6	11	.4	25
Whooping cough	15	.6	1	.04	16
Diphtheria	115	4.8	2	.05	117
Mumps	7	.3	0	0	7
Erysipelas	1	.04	1	.04	2
German measles	11	.4	4	.1	15
Total	331	...	97	...	428

In the study of these figures it should be borne in mind that the hospital was opened on January 1, 1917, as a scarlet fever hospital. Only convalescent cases of diphtheria were received at this institution until March 17, 1917, at which time the old contagious disease hospital was closed to diphtheria patients. Since then diphtheria cases have also been cared for at the new hospital.

SUMMARY

The following is a résumé of the essential conditions found necessary to minimize crossed infections in a general contagious disease hospital:

1. The hospital should be of modern construction.

2. The staff should be well organized, the resident physicians competent, and the nurses intelligent and well trained.

1. During the first eight months of 1919 among 2,518 patients treated at this hospital there were but 12 crossed infections. Of the latter, 9 were measles, 2 scarlet fever, and 1 chickenpox. This gives a crossed infection rate of less than .5 of 1 per cent.

3. Separate receiving rooms should be provided for different diseases.

4. Careful examinations should be made on admission and secondary diseases detected.

5. All doubtful cases should be isolated for observation and subsequent examinations.

6. Prophylactic dose of antitoxin should be given to any patient admitted with a positive diphtheria culture, but no clinical symptoms of the disease, without waiting for a Schick reaction. The only possible exception should be a known chronic "carrier."

7. All cases of scarlet fever with profuse nasal discharges or membranes of any character should be regarded as complicated by diphtheria until otherwise proven.

8. A number of children who have never had measles or chickenpox should not be placed in the same room or cubicle.

9. Measles or chickenpox should be isolated on the top floor of the hospital, if possible.

10. All contacts in case of measles or chickenpox should be isolated. In regard to the former, all susceptible patients in the hospital should be watched for the appearance of Koplik spots until twenty-one days after the development of the last case.

11. Books, toys, food, or packages of any description from outside the hospital should be excluded.

12. All persons not directly connected with the hospital should be excluded from patients. Only in the direst emergency may parents be admitted. (This does not refer to the visitors' aisle.)

13. Physicians and attendants should wash their hands with soap and running water whenever contaminated, which means whenever the patient or anything which has been in contact with a patient is handled. Also they should change gowns after coming in close contact with one class of cases before coming into contact with another class.

14. A check-up blank should be used for reporting each crossed infection to the medical superintendent.

15. The principles of medical asepsis should be carried out in connection with all of the above. These include a separate set of utensils for each patient, such as bed pan, wash basin, towel, and cup.

SURGEON GENERAL MERRITTE W. IRELAND HONORED BY ROYAL COLLEGE OF SURGEONS OF EDINBURGH

An honorary fellowship has been conferred upon Major General Merritte W. Ireland, Surgeon General of the United States Army, by the Royal College of Surgeons of Edinburgh, Scotland. This honor, which is paid to but one representative of each group of medical forces of the British Empire and its Allies, is the last of many which have come to this noted American surgeon whose biography is principally a list of achievements.

Merritte W. Ireland was born at Columbia City, Ind., May 31, 1867, and is now in his 53rd year. He was graduated from the Detroit College of Medicine in 1890, his graduation being followed by an internship in St. Mary's Hospital, Detroit. He is also a graduate of Jefferson Medical College, Philadelphia. In 1891 he entered the service as first lieutenant and assistant surgeon. During the Spanish-American War, he served with the Fifth Army Corps in Cuba, and later at Camp Wyckoff, N. Y. In 1899, he was promoted to surgeon with the rank of major of the Forty-fifth U. S. Infantry. Shortly afterward, he went to the Philippine Islands. In 1900 he was honorably discharged from volunteer service. Two years later he entered the office of the Surgeon General and in 1903 was promoted to major and surgeon. He became lieutenant-colonel in 1911. The next year he was returned to the Philippines. Three years ago he returned to the United States and was put in charge of the base hospital at Fort Sam Houston, Texas. He accompanied General Pershing to Mexico as surgeon of the expeditionary forces. When General Pershing went to France he accompanied him as chief surgeon of the American Expeditionary Forces. The rank of brigadier general was conferred upon him in May, 1918. In October of the same year he was promoted to Surgeon General in the Expeditionary Forces with the rank of Major General.

Maj. Gen. MERRITTE W. IRELAND, Surgeon General, M.C., U.S.A.

The MODERN HOSPITAL

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From a Standpoint of Business

The very sick patient, admitted to the hospital, is physically a bankrupt. His bodily liabilities exceed his assets. He goes into the receiver's hands.

The hospital, as the receiver, takes an account of stock, conserves the assets, and liquidates as far as it can the liabilities. Then the insolvent body becomes solvent and the patient is discharged.

Most hospitals stop here, considering their receivership performed. But if the hospital is to act as a good receiver, it will discharge the patient with some sound advice. It will enlighten him as to the dangers of speculative physical investments. It will insist that if the patient is to remain solvent, he must know how to invest his health and how to build up a reserve for time of need. It will make clear that good food is a paying investment, that adequate rest and exercise are good business. The hospital, as receiver, will demand that the bankrupt buy insurance in terms of recreation, and that he obtain an annual certified audit of his stock of health from a competent physician.

The institution that teaches the principles of business as applied to health is in an excellent position to go to the business interests of a community and say "Our business is allied to your business. Your profits are dollars while ours are healthy people. There is a ratio between the two in this community. We help you and we ask you to help us."

Montreal and the Next Annual Convention

It is with a very special satisfaction and pleasure that Montreal anticipates the visit of the American Hospital Association next fall. Historically and professionally the city has always been in the forefront of medical progress.

Montreal has now well over six hundred thousand inhabitants and is one of the most beautifully situated cities of the Empire. Ever since its foundation in 1642, it has been devoted to medical philanthrophy, for it was in that year that the celebrated Jeanne Mance[1] arrived with the founder of the city to take charge of the community of nuns who accompanied the earliest settlers of the country. The Hotel Dieu, the oldest hospital in America, and now one of the greatest Catholic hospitals in Canada, was founded by her. From these beginnings the city has advanced in its medical interests to such an extent that there are now many public hospitals which will bear favorable comparison with any on the Continent.

Apart from the Royal Victoria and Montreal General Hospitals, there has been founded in the last decade a large hospital for infectious diseases, and a magnificent new French Catholic hospital is in course of erection. It is largely due to the philanthropic citizens of Montreal that these institutions have been brought up to their present state of efficiency.

The McGill Medical Faculty, with its magnificent new buildings, will be of interest to all visitors, and its very modern laboratories and Department of Experimental Medicine, will attract no less attention.

Indeed, Montreal to-day is the chief medical educational center of the Dominion.

To the American visitor, the city is always a source of great attraction. As is well known, it is a seaport town with an enormous volume of shipping and traffic. It is the terminus of the most important railways in the country. It is full of historical interest, and the sight-seer will find both historical and scenic attractions which in themselves will well repay a visit. It is my intention later on to mention in detail such advice and direction as may be of help to prospective visitors in finding more easily all such opportunities for pleasure and profit as will be worthy of note.

It is particularly fortunate that the meeting

[1] The story of Jeanne Mance and the founding of Hotel Dieu was published in THE MODERN HOSPITAL, Vol. XIII, 4 (Oct., 1919), p. 296

is to be held in the month of September, inasmuch as during that month the weather is at its best, the opportunities for amusement by water and on land are especially attractive, and local excursions, the many interesting golf courses, and other forms of entertainment, are available for visitors as at no other time of the year.

H. E. WEBSTER.

A Training Course for Hospital Executives

One of the papers which was heard with unusual interest at the recent annual conference of the American Hospital Association at Cincinnati was that of Dr. A. C. Bachmeyer on "A Training Course for Hospital Executives." The keen interest it stimulated was not due to the fact that it dealt with a new line of thought, for the subject has been discussed from time to time by various individuals and organizations alive to the need of such a course, but rather that it presented the basic elements of a well thought out plan under which a municipal university and a municipal hospital will cooperate in the training of hospital executives, the university furnishing instruction in theory, and the hospital, in cooperation with other hospitals located in Cincinnati and elsewhere, providing instruction in the practical aspects of hospital management.

Other hospitals have been conducting courses in hospital administration for some time, notably the Massachusetts General Hospital of Boston, Bellevue Hospital of New York, the Presbyterian Hospital of Chicago, and Grace Hospital of Detroit. With a few exceptions, however, these courses have been pursued by women—usually graduate nurses—seeking preparation for executive positions in small institutions and, accordingly, have not always attempted to give training in the diverse problems which the executives of the larger hospitals are called upon to face. It is also true that isolated courses of lectures in hospital administration have been and are being given by experts. But to Doctor Bachmeyer must be given the credit for establishing in a university a department of hospital administration which, through close cooperation with a large municipal hospital, offers to men and women seeking to qualify themselves for responsible positions a comprehensive course of training, both in the theory and in the practice of hospital administration.

Such a course, it should be pointed out, has its distinct limitations, and the men back of this project, we are gratified to observe, are not laboring under any illusions as to just what it will accomplish.

"The University of Cincinnati," says Doctor Bachmeyer, "in organizing its facilities for this type of training, realizes that one year of intensive instruction, as contemplated, will not produce a group of mature hospital executives. We believe, as Emerson has said, that, 'colleges have their indispensable office—to teach elements.' This course is intended to teach, so far as possible, the elements of hospital administration, to give the student an insight into the problems and diverse aspects of institutional management, and to enable him to give an 'ideal worth' to his work."

A hospital is such a complex institution, and its administration, even on a small scale, calls for such a diversity of knowledge and ability that only years of experience can bring a commanding grasp of its management. But the course at the University of Cincinnati should place its graduates on speaking terms with the executive duties of the hospital superintendent and ground them well in fundamentals.

Is the Traditional Medical Course Indispensable for Successful Hospital Administration?

In announcing the establishment of a division of hospital administration in the Department of Industrial Medicine and Public Health in the University of Cincinnati's College of Medicine, Doctor Bachmeyer says that administrative positions in hospitals, such as those of hospital managers and hospital superintendents, are rightfully within the scope of the activities of the physician. "Rightfully," yes, but not wholly, as he himself concedes in a later paragraph when he says, "In view of the fact that non-medical executives and nurses are proving successful managers of hospitals, these courses of instruction will not be confined to physicians, but will be available to all persons whose individual qualifications are approved by the director and whose preliminary education will permit them to matriculate in the university."

Doctor Bachmeyer frankly admits that there are two sides to the question of whether the traditional four years of medical training are an indispensable qualification of a successful hospital superintendent in a large institution.

If it should be concluded that this course is not essential, and, as a result, non-medical men and nurses properly qualified by preliminary training in the sciences take the hospital administration course in increasing numbers, will it not be incumbent on the University of Cincinnati, through its medical college, to add to the course as at present outlined a wide range of subjects dis-

tinctly medical in character, which will give to the non-medical student those elements of medicine rightly regarded as essential to successful hospital administration?

After all, are not the duties which the hospital superintendent is called upon to perform largely administrative in character? While a thorough knowledge of medicine such as that afforded by the traditional four-year course is desirable, is it essential?

Would not a year's intensive study of the broad essentials of medicine similar in purpose to the year's intensive study of the essentials of hospital and business administration which Doctor Bachmeyer has inaugurated, suffice? We raise the question and throw the columns of the magazine open for discussion. Our readers are warmly invited to submit their opinions on this important topic.

No Personal Interviews, Please!

MAURICE BLUMENTHAL
32 EAST TWENTY-THIRD STREET
Room 402
NEW YORK CITY

September 20, 1919.

MR. W. L. BABCOCK,
SUPT., GRACE HOSPITAL,
DETROIT, MICH.

Dear Sir:

A gentleman of considerable wealth, who has devoted a liberal portion of his income to philanthropies along religious and educational lines, has decided to devote more attention to substantial philanthropy of local nature, as owing to the war having taken large sums for overseas and training camp activities as well as hospital development, local hospitals have suffered to a considerable degree due to the curtailment of local contributions.

A committee of experienced men will have charge of the distribution of whatever sums may be devoted to local Hospitals, and as they have manifested an interest in the requirements of Hospitals in your city and state, an information blank has been prepared whereon institutions desiring aid from this source may detail their requirements, as well as furnishing such other data the Committee deems essential to arriving at an estimate of what financial support your institution may need as well as learning what institutions are in the greatest need of help.

While the gentleman is desirous of aiding to the maximum of the institutions' needs and his own ability, he feels a policy should be established of institutions endeavoring to secure as much support as possible from local philanthropy, which added to what he might give would provide for such charitable work as the requirements of the community demand.

For institutions having a large outstanding debt, either mortgage or floating, it might be a measure of safety as well as efficiency to try and raise this debt through a campaign for local support as well as any donation which the Committee might decide to give.

Will you, therefore, indicate on the enclosed information blank whether or not your institution needs funds to continue its charitable work, and whether or not you will be able to raise locally sufficient funds to add to whatever donation may be decided upon by the Committee, to provide for a future period of charitable wants, as well as raising any outstanding debt, and if in your opinion such a debt could be raised locally provided a substantial sum was obtained from outside sources to help.

Awaiting your reply, I am,

Very truly yours,

M. BLUMENTHAL,
Secretary.

P. S. Unless advised by the Committee, please do not expect personal interviews, as all decisions will rest upon the detailed information contained in the information blank, which you are expected to fill out should you wish financial support for your institution.

At last some hospitals are to have their burden of debt lifted. So we are led to believe by Mr. Maurice Blumenthal, whose letter we publish in full in the adjoining column. Of course, there is no question about the good faith of Mr. Blumenthal or about the purity of his altruism. Undoubtedly he has the interests of the hospitals of this country solely at heart and is anxious that they should take full advantage of the kindly beneficence of his generous client. That his client wishes to remain *incognito*—what difference does that make? Is it not sufficient to know that he is a man of "considerable" wealth and has heretofore devoted a "liberal" portion of his income to philanthropy of a religious and educational character? Why itch after more knowledge before you return the information blank, indicating whether your institution needs funds to continue its charitable work?

That your hospital will receive help, if it deserves it and shows ability to raise an adequate amount of money, is sufficiently vouched for by the fact that a committee of experienced men (unnamed, let it be noted) will have charge of the distribution of whatever moneys may be devoted to local hospitals. In this attempt to raise funds Mr. Blumenthal is presumably prepared to help—for a consideration, dare we guess?

It may be betraying too great a curiosity, but, after reading Mr. Blumenthal's letter, we assuredly cannot be blamed for wanting to know why this unnamed committee of experienced men has gone so far afield as Detroit, Mich.? It is true beyond peradventure of a doubt that "local" hospitals have suffered to a marked degree by the curtailment of "local" contributions. But this is as true of the "local" New York hospitals as it is of any other "local" hospitals and we timidly venture to ask whether it would not be wise for Mr. Blumenthal to use his unquestioned persuasive powers in urging the gentlemen of the committee of which he is the secretary to confine their interest to the hospitals of the city in which their secretary has his desk room?

We were, moreover, curious to know more about Mr. Blumenthal and his generous client. We, therefore, took the trouble to look him up. We found, however, that his name does not appear in the New York directory at the address he gives. This we thought was perhaps due to his having moved in only recently. But we found that his name did not appear even on the building index board. We did find out that with thirty-eight other men he occupies desk room on one of the floors of the building and his mail is received for him by the man who runs the cigar store on the main floor. Well, perhaps, he is the *bona fide* representative of a man of "considerable" wealth, but we cannot help wondering if that gentleman is not Mr. Blumenthal himself.

Meanwhile may we remind our readers to be constantly on their guard and under no circumstances give out statistics and other important data except to properly accredited representatives of organizations and state agencies which have a legitimate right to ask for them.

The Rural Community and the Rural Hospital

On page 374 of this issue there appears the first of a brief series of articles under the general title of "Some Rural Communities and What Their Hospitals Mean to Them," by Miss Mary Katherine Chapin. These papers, based on ideas and plans which Miss Chapin is working out, are intended to serve as an introduction to a more thorough and comprehensive study of this pressing problem—a study which, without doubt, must soon be made if any intelligent, thorough-going program for the improvement of health conditions in our rural communities is to be formulated.

That this is an important and timely subject for discussion none will deny. Farming shares with the steel industry the honor of being a basic industry, and everything that is done to maintain —and, where necessary, to restore—the health of the farmer and those socially and economically related to him makes for increased productivity and general well-being. The rural hospital, correctly conceived, properly organized, and efficiently administered, should occupy an important place in rural economy.

The idea with which this study begins is that the first thing to ask of any hospital is not whether it conforms to this or that specific requirement, but whether, in view of the sum of its services to the community, it deserves to exist. Would the community be better off with or without it? Now, it is possible—at least, it may be conceded for the sake of the argument—that a benevolent despot, armed with a suitable questionnaire and a score card, might improve hospital conditions in our large cities by wiping out of existence every hospital in them which did not score up to a certain percentage of excellence. The former patients in these inferior hospitals would benefit rather than suffer, for they would simply be taken care of in the better hospitals, which would enlarge their facilities to meet the increased demand. The case is different, however, in the country. Many a rural hospital which would score extremely low, and which measures up even to that low standard only with difficulty and against heavy odds, is yet indispensable to the well-being of its community. Such hospitals need, not to be castigated or suppressed, but to be helped. Before they can be helped, however, they must be understood, which implies that the facts about rural communities and their hospitals must be better known than they have been hitherto. The place to begin studying the rural hospital, as intimated in the first paper of the series, is in the community which it serves. Such special study of rural hospitals is doubly necessary if it should prove that, as Miss Chapin has surmised in a series of editorials which appeared in this magazine earlier this year,[2] the rural hospital really has a field of its own and a function distinct in many ways from that of the urban hospital.

The papers in the present series will be largely introductory in character, and it is hoped that from this cursory examination of the problem a scheme for a more thorough-going and comprehensive study may be evolved.

Some Practical Measures of Death Prevention

So far as we are aware there are no figures covering the country as a whole relative to the number of fatalities in hospitals and sanitariums caused by patients falling or jumping from windows. Some conception of the frequency of this occurrence may be gained through a consideration of the experience of Cook County, Illinois, as related by Dr. Edward H. Hatton.[3]

The records of the coroner of Cook County show that during a period of twelve years extending from January, 1907, to December, 1918, 49 such deaths occurred in 31 different hospitals. Eight of the hospitals had 2 such deaths, two had 3, and one of the largest hospitals of the group had 7, showing that the initial death in many

2. "What Is the Matter With the Rural Hospital?" THE MODERN HOSPITAL, Vol. XII (April, 1919); "Once More the Rural Hospital," THE MODERN HOSPITAL, Vol. XII (May, 1919); "The Growth of the Hospital Idea," THE MODERN HOSPITAL, Vol. XIII (August, 1919).

3. "Fatalities in Hospitals Caused by Patients Jumping from Windows: From the Records of the Coroner's Office, Cook County, Illinois," Jour. Amer. Med. Assn., Vol. 73, p. 604.

instances did not for one reason or another prevent repetition.

The figures gathered by Doctor Hatton also show that in Cook County there was a noticeable tendency for the number of such deaths to increase in the closing years of this period. He attributes this tendency partly to the increase in the size of the hospitals and the number of used beds, and partly to the decrease in the number of interns, nurses, and attendants, combined with the inefficiency resulting from war activties.

Those of our readers who are interested in the conditions that prevailed when the fatalities took place, the time they occurred, and the type of patients concerned will do well to read Doctor Hatton's article. We are primarily interested in bringing to their attention Doctor Hatton's conclusions. From the facts adduced in his article he concludes that:

"1. A concerted effort should be made toward designing a standard hospital window and screen which would absolutely prevent such accidents and yet be satisfactory from the mechanical standpoint, as regards convenience in washing, use of fire escape, ventilation, and lighting.

"2. Nurses and attendants, especially those on duty during the afternoon and the first half of the night, should be continually warned of the possibility of such accidents occurring and should be prepared to act quickly and wisely in emergencies.

"3. Every toilet room used by patients should be protected by bars or gratings across the windows.

"4. Special precautions should be taken not only in regard to those who are actually delirious but also in regard to others who from the nature of their sickness may become delirious.

"5. With regard to foreigners as patients an effort should be made to have with them, from time to time, regular attendants,—or at least others—who speak their language."

The second and fourth suggestions merely emphasize the necessity of forethought. They involve no additional outlay or expense; yet they may be vitally instrumental in the actual saving of human life. Hospitals in which fatalities occur through sheer carelessness are justly reprehensible for the loss of life occasioned by their thoughtless negligence.

Likewise, the third suggestion, small in the amount of expense its adoption may occasion, looms large indeed when interpreted in the figures of deaths prevented.

A. R. Warner Chosen Executive Secretary of American Hospital Association

DR. A. R. WARNER.

DR. ANDREW ROBERT WARNER, for a number of years superintendent of Lakeside Hospital, Cleveland, Ohio, was appointed executive secretary of the American Hospital Association at a meeting of the Association Board of Trustees held in New York, October 10, 1919, succeeding Mr. Howell Wright, who for more than a year has been acting as temporary executive secretary. Doctor Warner begins his new duties November 1.

The announcement of Doctor Warner's appointment is a matter for congratulation among his many friends. His activity in hospital matters generally has won for him a nation-wide acquaintanceship among hospital executives and physicians, and recognition of his ability is evidenced by the number of responsible positions he has been called upon to fill.

Doctor Warner was born at Mentor, Ohio, in 1875. He secured his medical education at the Western Reserve University School of Medicine, graduating in 1906. He has been president of the Ohio Hospital Association, and last year was president of the American Hospital Association. He is a Fellow of the American Medical Association and recently was elected first vice-president of the American Conference on Hospital Service. He is especially interested in hospital standardization and the group practice of medicine, and a number of his articles on these subjects have been published.

While the fifth recommendation may be difficult of execution, yet at least a conscientious effort should be made to carry it out.

The first suggestion is imperative, and progressive hospital architects, practical builders, superintendents, and inventors should turn their attention at once to the designing of such a standard window and screen.

While it is to the final achievement in this point of hospital construction that we must look as the greatest preventative of these deaths, administrators will do well to spare no pains in the adoption of every practical measure of prevention.

A Criticism and a Reply

An interesting point in connection with the architectural study of the State Tuberculosis Hospital at Wallum Lake, R. I., as presented by the superintendent, Dr. Henry Lee Barnes, on page 371, is the fact that the screens between the beds (used when bathing patients or giving them other attention) were built in before the structure was plastered by bolting part of the fixture to the gypsum block partitions. When not needed, these screens swing back against the wall. In the opinion of the superintendent they are much cheaper and more securely fastened to the wall than any manufacturer's fixture applied over the plaster.

A sound criticism of the plans of this hospital was deemed worthy of being quoted entire, and we believe that the various points brought forth by the critic whose article appears on page 424 of this issue, will well repay study.

The arguments did not, however, remain unanswered. In his reply, which follows the criticism, Dr. Barnes meets the several criticisms clearly and concisely. After having presented an admirable defense, he adds a number of his own criticisms which embody the result of his experience with the building. We believe that our readers will find the entire series—the original article, the criticism, and the reply—of especial value and interest.

Many people who are complaining of not getting a square deal would complain a good deal more if they got it.

There are two things I never worry about—those things I can't help, and those I can—Robley D. Evans.

One Point of View

An old and dusky daughter of the South, to whom things present themselves in terms of her profession, describes a Red Cross parade in which the canteeners and surgical dressings workers marched in all their white glory:

"Lawsee, Miss Anna, it cert'nly was a gran' spectacle! Nevah in all ma life did I see so much washin' at one time!"

FREE DENTAL CLINICS FOR RURAL SCHOOLS

North Carolina Pioneer in Movement for Traveling Dental Service—Educational and Prophylactic Side of Question Emphasized

North Carolina was the pioneer state in appropriating money from the public school funds to be used by the state board of health in the examination and for the dental treatment of children in the rural schools. Practically every state in the Union provides free examination for school children, but until this forward step was taken in 1917, little of a specific nature had been done to remedy defects found.

A bureau, charged with the responsibility of executing the law, immediately formulated plans for a systematic remedying of conditions. When it became known that 80 per cent of the school children of the state needed dental treatment, that defect was the first one to receive consideration.

The opinion that treatment for a physical defect should be as free to a school child as the school itself resulted in making the clinics free to every child between the ages of six and twelve years, with no distinction as to race, sex, color, class, or financial standing.

"As there was no precedent pertaining to the solution of the rural problem, we found," said George M. Cooper, M.D., director, department of medical inspection of schools, Raleigh, writing on the subject in *Modern Medicine*, "that we were embarking on an uncharted sea. However, the results have a thousand times more than justified the adventure. This kind of work has come to North Carolina to stay. For the benefit of those interested in the details of our methods, the following summary is submitted:

"Six dentists who had been recently graduated and licensed to practice in the state, all young men of high type, were selected to do the work. A campaign running from four weeks to three months in each of nine counties in the state was planned. Each man was supplied with a McConnell folding chair, a foot engine, a student's cabinet, a few simple drugs like novocain, tincture of iodin, oil of cloves, a full equipment of instruments such as excavators, elevators, burrs, brushes with pumice, with dental alloys, and the necessary material for the simpler fillings. Each one was placed in an automobile and taken from place to place over the county, the children being summoned by local agencies. The work was done for children between the age of six and twelve years only. No synthetic or gold fillings were undertaken, no crown or bridge work done; diseased pulps received only temporary treatment, and root canals were not treated. The work consisted mainly in placing amalgam fillings for the six-year molars, and other permanent back teeth, some temporary fillings, silver nitrate treatment, etc., cleaning and extracting when necessary. The educational and prophylactic side of the question was stressed at all times as the most important. The work, ending early in December, resulted in the treatment of nearly seven thousand children in the nine counties. More than 227 dispensaries were held, and over 100 lectures on oral hygiene made.

"Three dentists have been employed nearly all the time since the first of January. Beginning with August 1, this force was increased to nine, but as we always prefer to talk about something after it has been done, the result of this year's work will suffice for another story. Naturally, in a state with 800,000 school children, more than three-fourths of them needing dental treatment, it is unthinkable that a very large percentage could be reached by nine dentists working all the time, but when the propaganda is spread all over the state and the people have preached in these and other homes in every section knowledge concerning the importance of the care of the teeth, and the fact that the state is sufficiently interested to put up thousands of dollars a year in the effort to supply this care, he is a pessimist indeed who can not see that the result of the work will have an enormous influence upon the health of the children of this and succeeding generations."

A FEW BRIGHT ONES FROM PROBATIONERS

Blunders of Younger Members Cause Superiors to Seek Psychopathic Ward—Even Most Brilliant Have Moments of Temporary Aberration

Every hospital training school is due to have enter about every so often at least one brilliant idiot, and even those who turn out to be the brightest nurses do and say absurd things when they first find themselves in the new environment of hospital life. Here are a few things that really happened and we shall be glad to have more of these stories illustrative of the humor that creeps into the dark days of probationary training.

Head nurse to probationer: "Please go to the operating room and get me some T binders."

Probationer: "Yes mam, but which kind of tea shall I use, green or black?"

A young nurse was told to give to a patient a tablespoonful of effervescent sodium phosphate. She obeyed orders to the letter, giving the patient the dry crystals and following up the dose with a glass of water. The patient frothed furiously at the mouth, and both patient and nurse were scared into hysterics.

The crotchety surgeon entered the ward at meal time and found only a probationer on duty. In a great hurry to adjust a dressing but unable to find any instruments, he yelled at the only one present that looked like a nurse, "Where's the probe? Fetch me a probe!" The poor little probationer, anxious to please, answered, "Won't I do sir?"

In one of its big charity wards a certain hospital had a demented old Dutch woman who had the habit of hiding things in her bed, and it was not uncommon to find table silver, meat, and vegetables or almost anything in the way of institution supplies under her pillow. She had been operated for cholecystitis and was on the way to recovery, all drainage having been removed, but the wound was still partly open. One morning a new probationer, who had overheard someone say that the wound must be kept open, found the cork of a grape juice bottle under the old lady's pillow and very carefully inserted the cork into the partly open wound. Strange to say, no sepsis followed her experiment. The old lady made a good recovery and still lives to torment her family.

An almost hopeless probationer was wished on a very good training school by one of its chief surgeons. Her speech was geared to about one-third the speed of that of most any other human being and she moved and worked at the same rate. The diet kitchen nurse, to whom she was at first assigned, begged the superintendent to take her away, saying that she herself would be driven to the psychopathic ward watching Miss A butter the toast in one direction with sober, serious, gridiron strokes and then repeat the whole process in a direction at right angles to the initial performance. She averaged about three full minutes to each piece of toast. So the poor little seeker after a profession was sent to the operating room, where her efforts were but little more successful. One day she heard the supervisor say, "I believe I have left the cold water tap from the sterilizer jacket running." Whereupon she arose and said, "yes mam, shall I stuff something in it?"

Another day with an inimitable drawl to which no words could do justice this same probationer popped the following question at the unsuspecting supervisor: "Mrs. —— has had pneumonia and the little baby she has with her is to be taken to the obstetrical ward. What will they do to keep the baby from carrying infection over there?" Just for fun the head nurse answered: "They will put it in the sterilizer and boil it for half an hour." Shocked beyond measure, the little probationer gasped in tones of deepest pity, "Oh the poor little thing—I'm afraid it'll die!"

Another probationer, who seemed to have considerable difficulty in getting the assignments to percolate through her gray matter, perpetrated the following: The instructor had repeatedly impressed upon the class the necessity of cleaning a room thoroughly after it had been occupied by a patient with a communicable disease. When called upon to recite the student in question managed to remember something about fumigation and disinfection, but always forgot to include the fact that all things which could be so cleaned must be thoroughly washed with soap and water. One day, fairly in desperation, the instructor burst forth with, "Miss A—please remember that cleanliness is next to godliness and that the real cleaning must be done with soap, water and elbow grease." In the final written examination, this is the answer to the original question that Miss A wrote. "Cleanliness is more than godliness and the first thing to do to a room which has been occupied by a patient with a catching disease is to go after it—using soap, water, and axle grease."

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This is the type of ambulance airplane used by France for French African service. The four-wheeled under-carriage affords additional safety for the airplane as it lands with its sick or wounded.

St. Thomas's Hospital facing river along entire front.

ST. THOMAS'S HOSPITAL, LONDON

First of British Hospitals Planned in Accordance with Modern Ideas—Date of Original Foundation Obscure —Present Site Exceptionally Well-Suited to Character of Institution

St. Thomas's Hospital, London, was one of the first British hospitals to be built in accordance with modern ideas. The foundation stone of the present buildings was laid by Queen Victoria in 1868 and the hospital was opened in 1871. The cost was £600,000.

The buildings are 1,710 feet long and consist of a series of blocks separate from each other, but connected by corridors open to air on all sides. Between the blocks are grassy quadrangles, and along the entire front is a broad terrace overlooking the river. Six of the blocks are devoted to the use of patients; one includes the treasurer's residence and St. Thomas's Home for paying patients, and one constitutes the medical school.

About one-third of the beds are given over to medical, and the remainder to surgical cases. There are separate wards for the treatment of special classes of diseases, one being an isolation ward for infectious diseases, including tuberculosis of the lungs. Each bed is allowed 1,800 cubic feet of space, and in the infectious wards, 2,500. In recent years, alterations have added a number of beds and a nurses' home; the out-patient department has been rearranged; the laboratories have been extended; and the scope of the Roentgen Ray Department has been widened.

It has been well said that the record of St. Thomas's Hospital from the earliest times to the present day, is an epitome of the rise and progress of medical science in England. Its existence may be traced back through eight long centuries, and its history is linked with many ancient traditions.

The exact date of the original foundation of St. Thomas's is shrouded in the mists of antiquity; but since it was dedicated to St. Thomas à Becket, who was canonized in 1172, and as the first building was destroyed by fire in 1207, the origin is fixed between the two dates. At one time, it was known as St. Thomas à Becket's Spital. It was reendowed and a new charter granted in 1553 under Edward VI, and the dedication transferred to St. Thomas the Apostle.

In 1693 the hospital was rebuilt, and in 1707, Thomas Guy, who afterwards founded the hospital that still bears his name, added another wing. Additions were made in the eighteenth and nineteenth centuries, but in the latter half of the last century, the historic pile gave way to the advances of the railway contractors, who for the sum of £300,000 entered into possession of the lands which once had been purchased for £31.

For a few years the work of the hospital and school was carried on at the old Surrey Gardens, in the hall famous as Spurgeon's Tabernacle, but in 1871, the present series of buildings was completed, and formally dedicated by Queen Victoria. The nurses' home is the direct outcome and, until the end of her life, the object of the sedulous care of Florence Nightingale.

The Medical School as an organization, though as old as any other British school of medicine, is yet a product of recent times, but it is only in the last one hundred and fifty years that any records have been found of the school's having required separate buildings. For a time, the two "Borough Hospitals," as they were called—Guy's and St. Thomas's—ran in double harness; but they pulled different ways, and, for many years past, each has drawn its own load with mutual respect and goodwill tempered by a friendly rivalry. St. Thomas's School owes its distinction, not perhaps to any great number of meteoric speculators and dashing experimentalists that it has turned out, but to the conspicuously high average maintained by the physicians, surgeons, and specialists who, in every quarter of the English-speaking world, look back with affectionate regard to their student days at Thomas's.

St. Thomas's is one of the few London hospitals that has no dire need to appeal to the public for funds. It has been richly endowed by pious donors in the past and in the course of centuries the value of some of these endowments has greatly increased. Because, however, of the dwindling of revenues from agricultural lands in recent years, subscriptions have been received and grants allotted by the various charitable funds that exist for the purpose of assisting voluntary hospitals so that it does not subsist merely on the proceeds of its endowments.

The present buildings occupy an imposing position on the south bank of the river, facing the Houses of Parliament, the rear overlooking one of the poorest sections of London. Just beyond the extreme limit of the hospital is Lambeth palace. The site is exceptionally well suited to the character of the institution. It has the wealth of the west, the squalor of the east, with the river on one side, and a public park on the other providing the light and air so necessary to the welfare of the patients.

Cinema Aid to More Careful Living

The latest Red Cross moving picture, "Winning Her Way," is a film which reveals the vital work of the Red Cross public health nurse in a sleepy little village persistently behind the times.

Beside being rich in beautiful rural scenery and absorbing in plot, the picture gives the observer a clear insight into unhealthful conditions that exist in many small towns today and shows the importance of establishing public health nursing in every community.

The nurse sticks to her job as a teacher of more care-

ful living, despite the opposition of short-sighted villagers who object to "these new-fangled ideas." Championed by the village doctor, she gradually wins her way after her services prove invaluable in a number of emergencies, the climax coming when she saves the life of the daughter of the town "boss," one of her chief opponents. A very beautiful love story also is woven into the thread of the play.

PLANNING THE HOSPITAL WITH REFERENCE TO FUTURE DEVELOPMENT*

Present and Possible Needs of Institution With Sufficient Funds for Construction and Maintenance Chief Factors—Original Structures Should Be Built With View to Minimizing Cost of Alterations or Additions

By OLIVER H. BARTINE, Hospital Consultant, New York City.

Not a little has been written upon the subject but, to those intimately connected with the building and operation of hospitals, its importance will be manifest. The beginning of a new hospital is usually one of relatively small things in many ways, but it is never small in comparison with its potential future. The constantly increasing demand for hospital treatment assures the future growth of all hospitals. This potential future is a vitally important factor, whether the hospital under consideration is an altogether new institution, or whether it is the beginning of the development of a substantially new institution on the foundations of an existing hospital. Because of this, the most careful consideration of the possibilities of future development is quite as important as is the study of the present needs and the method of meeting them.

To the end that the best results may be assured, a careful and thorough community survey is essential. This survey should include a comprehensive study of the character of the community, the extent of hospital service required, and the amount of hospital service already available. It should also be ascertained whether general service or service of a special character is most needed. Should the new institution be designed for the treatment of some special disease, the survey may be extended to include a much larger geographical area. Whether the service to be rendered is in the nature of free service, whether it is to be for paying patients, or a combination of both must be considered; and the matter of an outpatients' department, or dispensary, must also be given attention.

The past records of the hospital, if the proposed building or buildings be an addition to an existing hospital, will be a valuable guide in reaching conclusions in regard to these points.

The property available for present enlargement and future growth should also be studied with the greatest care. Especially is a view to the far-distant future essential.

Unless funds sufficient for the construction of the proposed buildings and for the future support of the institution, are already assured, this problem should be carefully worked out. The construction of buildings for which there is no available means of support may disastrously handicap the hospital at its inception and for many years to come.

The process of ascertaining the probable revenue and the operating costs is a simple one, but both the revenue and the operating cost must be borne in mind throughout the period of deliberations. Otherwise, the sorely tried contributing public will be called upon at a later date for money to make good the mistakes of the building committee.

To carry on this survey properly, a committee of the board of trustees should be carefully organized, which may well constitute the building committee. The members should include the hospital superintendent, the supervisor of nurses, the dietitian, the chairman of the medical board, the consultant, the architect, and the consulting engineer and builder, organized in accordance with the method which I have heretofore advocated.[1]

It is not to be expected that the architect can supply the committee with plans, or even indicate the needs of the institution. The committee should confer with him in regard to the building needs, giving him the result of its conclusions based upon the study of the hospital needs of the community over a period of years. This study should include the many possible changes in the future of the community.

Caution should be exercised in analyzing the recommendations of any one individual. Instead, greater regard should be paid to general principles. A wide divergence of views as to the arrangements and equipment of any hospital will be found among different authorities. With the building committee rests the final responsibility. The hospital must be so constructed and equipped that it will adequately meet all demands and prove efficient under all conditions.

The natural law of supply and demand applies to the work, development, and conduct of the hospital, just as it applies to all fields of mercantile and industrial effort, hence maximum care and foresight should be used in planning hospitals and in the selection of their equipment so that they will be capable of future development along fundamental lines provided for in the original survey.

A determination of the requirements to be met in the proposed building or buildings, and of the amount of funds which may be raised, are associated problems which cannot be separated. Only as much building should be undertaken as can be well done with the funds available. On the other hand, sufficient funds should be provided to do as much building as is really needed. Cheaply constructed buildings inevitably involve high cost of operation and maintenance. Therefore, first and foremost the needs of the institution present and future, should be most carefully determined, and plans should be sufficiently developed that all cost of the building or buildings, present and future, may be at least approximated. It must be ascertained, also whether sufficient funds can be procured for the building or buildings proposed. A part of this problem is that of the extent of future buildings needed, and the probability of sufficient funds being found available.

While tentative plans for the entire building or group of buildings should be outlined to determine the probable ultimate cost of construction, operation and maintenance, only the plans for the immediate building need be prepared in complete form; but the tentative sketch plan of the ultimate development is essential in order that the relation of the present buildings to those that will be built in the future may be properly worked out, and in order that the present and future financial problems may be grasped.

Whether it is possible to provide for future growth and development in the plans and construction of the initial

*Read at the Twenty-First Annual Convention of the American Hospital Association, Cincinnati, September 8-12, 1919.

1. "The Building of the Hospital Organization and Methods." Presented before the Hospital Alliance, City of New York, December 1, 1914

building without materially sacrificing present efficiency or future costs is a question that has arisen. Not only can this be done but if the proper degree of foresight and judgment is used, it can be done so as to secure a minimum per capita cost of maintenance.

The real problem then, resolves itself into how to plan the construction of the first unit or units so that while efficiently serving immediate needs alterations may be made to meet future needs at a minimum cost for changes. The building must be at all times a complete hospital in all its details, but this must be effected without handicapping present service or mortgaging future moneys. A proper proportion of patients and service spaces per unit must at all times be maintained and neither must be sacrificed.

The nearness or remoteness of future extensions will largely influence the decision of the committee many times and will, in some cases, determine whether future expense or present efficiency shall be sacrificed.

Rooms designed for certain future purposes may well be temporarily used for other present needs. A certain degree of present inconvenience or a later serious expense may be involved in decisions made at this time, hence the need of careful study and decisions cautiously reached. The tendency to handicap present service by rooms of inadequate size must be avoided. Especially should needs involving built-in equipment, which may be required in the future, be carefully studied, and all necessary provisions made in the heating, plumbing and electrical installations for the later installation of built-in equipment. Most of the piping involved in these installations is concealed and any changes are expensive.

The relation of present to future construction, in-so-far as it affects floors, exterior walls, supporting partitions, corridor walls, etc., should be studied with such care that these walls will be permanent. Minor partitions may be constructed of plaster or terra cotta blocks in such a way as to involve little cost in their removal or re-location. The greater the extent to which, by careful foresight, such alterations may be eliminated, the better.

Where a new building constitutes the first part of a greater building or the first of a group of buildings, the initial construction must include all the elements of a complete hospital. This constitutes a problem of one nature. Quite a different problem is presented where the proposed building constitutes an extension of an existing building or the beginning of a reconstruction of the entire institution. In such a case it consists in correlating the new construction to the existing building and equipment in a harmonious manner so as to continuously supplement both.

In every case the building, or buildings, must include every necessary element of a complete hospital—administrative department, patients' and service space, and equipment. Some of these departments will, with later additions to the institution, be segregated, and provision should be made for doing this in such a manner as to involve the least disarrangement of present construction. In the arrangement of rooms for future uses so that they may be temporarily used for other present purposes, future patients' rooms may be used for nurses' and doctors' rooms, and even for the help; present operating rooms may be used for future delivery rooms; future locker or storage rooms may be used for heating, other service equipment, etc. Certain departments may be utilized later for laboratories, research, diagnostic, preventive medicine, social service, or other special departments which the development of the locality may render necessary. The great strides which medicine and surgery are now making will, from time to time, necessitate many additional departments.

Serious consideration should be given to the advisability of establishing a country institution for the care of the less acute cases, convalescents, and cases of a special type. This may have a distinct bearing upon the present and future of the proposed hospital.

The membership of this Association should include many men, and women too, as Hospital Administrators who have literary talent, this being exemplified in the hospital literature of today. It is unfortunate that many able hospital administrators who have a fund of valuable knowledge and data cannot, or are reluctant, to afford the time to make public record of this information. Such knowledge and data would be of untold value to those engaged in the planning and administering of hospitals, especially where such information offers guidance for the future.

The standardization of departmental equipment and administration has undoubtedly advanced more rapidly than has the standardization of the hospital as a whole. The development of the whole, especially as it relates to future growth, is of greater importance than the excessive development of individual departments, except in the case of specialization.

Much valuable information of a definite character will undoubtedly be evolved as a result of the study now being carried on by the College of Surgeons, which, be it hoped, may be placed before the hospitals in the form of concrete data and recommendations.

My predictions of the war period, especially the one made at the last meeting of this association, that building costs would advance upon the conclusion of the war are being verified by the prices of today. Such temporary and limited recessions as occurred are now offset by current increases, with no hope of lower costs for years to come. Rather now we look forward to somewhat increased costs of material and labor with a degree of assurance that leaves no doubt as to the wisdom of building at the present time. Mr. Crow, architect, and Mr. Kimball, consulting engineer, presenting papers at this session, can but accord with this statement. The matter of cost may not, therefore, be urged as a reason for postponing the erection of needed hospital buildings.

Many complexities frequently arise over endowments, memorials, and memorial hospitals. When a memorial institution is under consideration, its future development should be definitely studied from every view point in order that the present and future shall not be handicapped as a result of the provisions upon which the memorial is founded, or through a misapplication of the provisions of the donor.

Mr. Lewis, an architect, has very ably stated recently that the conclusion of the war presents the thought of many possible memorial hospitals. With this statement of fact, we perhaps all agree. The plan for a Roosevelt Memorial is very excellent, but would it not make a more glorious and appropriate memorial, as well as one more helpful to mankind, if this memorial were in the form of a national hospital, known as "The Theodore Roosevelt Hospital," to be built in Washington and to have its present as well as its future properly provided for? I believe that if Mr. Roosevelt could have expressed his wish, it would have been for an active memorial.

The hospital can in its important aspects embody all the architectural beauty and artistic design of a monument in its expression and symbolize Mr. Roosevelt, the great, fearless, patriotic American citizen, as well as our endeared statesman.

DR. A. R. WARNER BECOMES EXECUTIVE SECRETARY OF HOSPITAL ASSOCIATION

Trustees Assemble at New York and Decide Important Matters—Headquarters Will Be in Chicago—Institutional Membership to Be Fixed Policy

All nine members of the Board of Trustees of the American Hospital Association for the year of 1919-20 attended the first meeting of the Board at the Manhattan Hotel, New York, on October 6, 1919. This was a splendid showing and augurs well for a year of genuine interest and active work. The meeting was presided over by Dr. Joseph B. Howland, the newly elected president, who recently became superintendent of the Peter Bent Brigham Hospital, Boston. Mr. Howell Wright, who relinquishes his position as executive secretary of the Association on November 1 acted as secretary. The other members present were Mr. Asa S. Bacon, superintendent, Presbyterian Hospital, Chicago; Dr. Louis R. Baldwin, superintendent, University Hospital, Minneapolis, Minn.; Richard P. Borden, Union Hospital, Fall River, Mass.; Dr. Louis H. Burlingham, superintendent, Barnes Hospital, and administrator St. Louis Children's Hospital, St. Louis, Mo.; Miss Mary L. Keith, superintendent, Rochester General Hospital, Rochester, N. Y.; the Rev. Maurice F. Griffin, St. Elizabeth Hospital, Youngstown, Ohio; Dr. Robert J. Wilson, superintendent, Health Department Hospitals, New York City, and Dr. Andrew R. Warner, superintendent, Lakeside Hospital, Cleveland, Ohio.

Ways and means of broadening the work of the Association were thoroughly discussed, for it was felt that the Association was now face to face with a big opportunity for doing some greatly needed constructive work.

The important question of the location of the Association's headquarters was re-opened. The advantages and disadvantages of the principal cities of the country were carefully considered and Chicago was finally decided upon as the best place in which to locate the home office because of its geographical position and its great medical and hospital interests. The Cleveland office will be continued for a short time, but the Washington office will be closed at once.

Another question, which was brought up, was the executive secretaryship of the Association. After prolonged discussion, Dr. Andrew R. Warner was appointed to the position. He will assume his duties on November 1, 1919.

It was decided that the exact date of the 1920 meeting, to be held at Montreal, Quebec, would be determined only in conference with the Montreal local committee, but preference was expressed for the week of October 4 to 10.

The Trustees felt that it was a desirable custom to have the annual meeting of the American Dietetic Association at the same time and place that the annual convention of the American Hospital Association occurs. The secretary, therefore, was authorized to extend an invitation to the American Dietetic Association to meet at the same time and place that the American Hospital Association meets. The secretary was also authorized to extend a similar invitation to the National Society for the Promotion of Occupational Therapy.

Mr. Michael M. Davis, Jr., Director of the Boston Dispensary, was appointed consulting chief of the Service Bureau on Dispensaries and Community Relations. The experience and prominence of Mr. Davis in both fields covered by this bureau are well known and members of the Association who have occasion to consult with this Bureau will receive valuable service. All correspondence with the Bureau is to be carried on through the executive secretary of the Association, who will on occasion refer problems to Mr. Davis for information. These consultations are without expense to the institutional members of the Association. If, however, it is mutually agreed that it is desirable for Mr. Davis to visit the community, any expense which he incurs in so doing will be paid by the dispensary or hospital he is serving.

The value of a Service Bureau on Architectural Plans and Buildings was considered, particularly in relation to its value to small hospitals. It seemed desirable that the smaller hospitals, which ordinarily employed a local architect, who often has had little or no experience in hospital planning, should have access to a bureau of this kind. Various plans for the organization of such a bureau were discussed but no decision was reached. The matter was left in the hands of Mr. Richard P. Borden and Dr. Robert J. Wilson, who will give this matter further consideration and report at the next meeting of the Board of Trustees.

It is now assured that the institutional membership of the Association will become the primary membership, as originally planned. It is desirable, however, that hospital workers as individuals have direct contact with the American Hospital Association and that hospital workers be organized as other vocations are organized. It is equally desirable that the state associations develop and become stronger. For these reasons the Trustees are giving consideration to the development of a plan of organization similar to that now used by various medical nursing associations. The essence of such a plan is that personal members join the American Hospital Association through the state association, thereby becoming members of both and adding to the strength of both. The president appointed a committee, consisting of Dr. A. R. Warner, chairman, the Rev. M. F. Griffin, and Mr. Asa S. Bacon, to give further consideration to the details of such a plan and to present their conclusions at the next meeting of the Trustees.

The meeting was marked by a strong desire to see the Association do a great deal of constructive work and there is every reason to believe that this is the first of a series of meetings of the Board of Trustees that will result in the Association taking a most helpful leadership in a growing and increasingly complex field.

Honor the Dead by Helping the Living

In a suburban town a few years ago a wedding of much interest took place. A girl of wealth and social position, beautiful in spirit and lovely in face and form, was married to a young man of fine character and high ideals. For one happy year they lived together in New York. Then again the father's home in the suburbs was filled with flowers, and his only daughter and her baby lay sleeping among them.

The question of a memorial came up. In life she had a sweet way of going among those who were sick or sad and bringing to them cheer and comfort. An idea dawned upon the young husband's mind, it grew and expanded.

As she had loved to help the sick and the feeble why not give to the little town in which she spent her girlhood someone who would do it in her place? The result was a public health nurse for that community, and in what more fitting way could the spirit of the young mother be perpetuated?

Our land is filled just now with those who are mourning the loss of a son, husband or brother. Perhaps there are many bereaved parents who are seeking a fitting

memorial. Surely as a remembrance for one who laid down his life so that others might live, the public health nurse is a beautiful memorial. Just at present the Red Cross is seeking to install a public health nurse in every community.

THE SEGREGATION OF POWER PLANT COSTS

Complete Records of Departmental Operations Valuable in Promoting Efficiency and Economy—Apportionment of Expenses Complex Problem

By D. D. KIMBALL, New York State Committee on Ventilation, and HENRY M. POLLOCK, M.D., Superintendent, Massachusetts Homeopathic Hospital, Boston.

The cost of installing the complete mechanical equipment of a hospital may equal 25 to 30 per cent of the total cost of its construction, and the cost of maintaining and operating this equipment may be in similar proportion to the cost of administering and operating the hospital. It appears of the greatest importance, therefore, that complete records of plant operations be kept. They may be made especially valuable in promoting efficiency and economy.

SERVICES SUPPLIED BY THE POWER PLANT

The importance of the power plant department, and the variety of services it provides, are not fully realized even by those most interested. A survey of these services may well serve as the basis of our consideration of this problem.

The following are common to all hospitals:

Live steam is used in the power plant, at boiler pressure; the kitchen, at fifteen pounds to forty pounds pressure; the laundry, at eighty pounds to ninety pounds pressure; the sterilizers, at sixty pounds pressure; the drying equipment; for warming food, dishes, blankets, clothing; and certain radiation—as in operating rooms, requiring steam when heating system is not in service.

Low pressure steam is used for warming the building (or buildings) and for heating water.

Electric service is used for lighting, power service, x-ray equipment, nurses' signal system, annunciators, telephones, fire alarm system, clock system, watchman's clock system, bells, and batteries.

Water is used for the cold water system, hot water system, sterilized water, boiler supply, refrigerating plant, fire protection—hose and sprinklers, lawn sprinkling.

Refrigeration is used for cold storage, ice, and cooled drinking water.

Elevators include those for passengers, freight, dumbwaiters, and ash hoists.

Repairs cover the heating plant, the live steam equipment, the plumbing system, the electric equipment, the elevators, the refrigerating system, and the building.

Garbage disposal may best be treated as a part of the heating plant, being a small item.

Janitor service should preferably be placed under the care of the house-keeper.

ITEMS OF COST

The items making up the cost of operating the power plant department are, fuel, labor, water, electricity, repairs, and supplies.

The exact division, or assignment, of these costs is a most complex problem, especially if it be desired to apportion the cost to all of the different services rendered, and among the different departments or buildings (where there are several buildings). Nevertheless, it is believed that such a method of power plant accounting is possible.

New institutions of magnitude should be so equipped with scales and meters as to make exact departmental determinations of cost possible. In smaller and older hospitals a certain amount of approximation is necessary. Even so, it is believed that the effort is well worth while. Indeed, in many cases the administration of the hospital's finances makes this necessary.

The form will be the same in both exact and approximate accounting, only the methods of determination will vary. A basic plan of accounting will, therefore, first be outlined.

MAJOR ACCOUNTS

As a basis for accounting a "power department" ledger should be used for the purpose of determining the detailed and gross cost of the power plant operation. This ledger should first provide for certain major accounts in which items of operating cost should be charged. These should include (1) fuel, (2) water, (3) electricity, (4) labor, (5) repairs, and (6) supplies.

All bills for fuel, water, repairs, and supplies should be charged directly to the corresponding "major accounts," and the amount of the power department payrolls should be charged to the "labor" account.

If the electric current is purchased, the cost there-of appears directly. Otherwise, into the "electricity" account will be entered a certain portion of the "fuel," "labor," "water," "repairs," and "supplies" accounts, by means of a series of transfers. This is accomplished by charging against the "electricity" account a proper proportion of each of these other "major accounts," determined as explained below, while crediting such accounts with the amounts so charged to "electricity."

SERVICE ACCOUNTS

These "major accounts" are then to be sub-divided or charged into various "service accounts" in such a manner that the cost of each service rendered is determined.

Certain services are associated and the cost of others is so small that a considerable degree of grouping is permissible in order to avoid an unnecessary multiplicity of accounts. In small institutions this grouping may be carried farther than in large plants. Two lists of so-called "service accounts" are therefore suggested, as follows:

Complete List	Modified List
(a) Heating.	(a) Heating.
(b) Drying.	(b) Cold Water.
(c) Sterilizing.	(c) Hot Water.
(d) Cold water.	(d) Kitchen.
(f) Kitchen.	(e) Laundry.
(g) Laundry.	(f) Lighting.
(h) Lighting.	(g) Power.
(i) Power.	(h) Refrigeration.
(j) X-ray.	(i) Repairs.
(k) Secondary (electric) systems.	
(l) Refrigeration.	
(m) Elevators.	
(n) Repairs.	

In the modified list "drying" and "sterilizing" are included in "heating"; and "x-ray," "secondary electric systems" and "elevators" are included in "power." "Cold water" and "hot water" may also be combined, but the separation of these is desirable because of the additional expense involved in heating the "hot water." Electricity used in heating pads, toasters, baths, vacuum cleaners, disc fans, etc., is included in "power." Electricity used for driving ventilating fans should be charged to "heating," the term "heating" being intended to include ventilation.

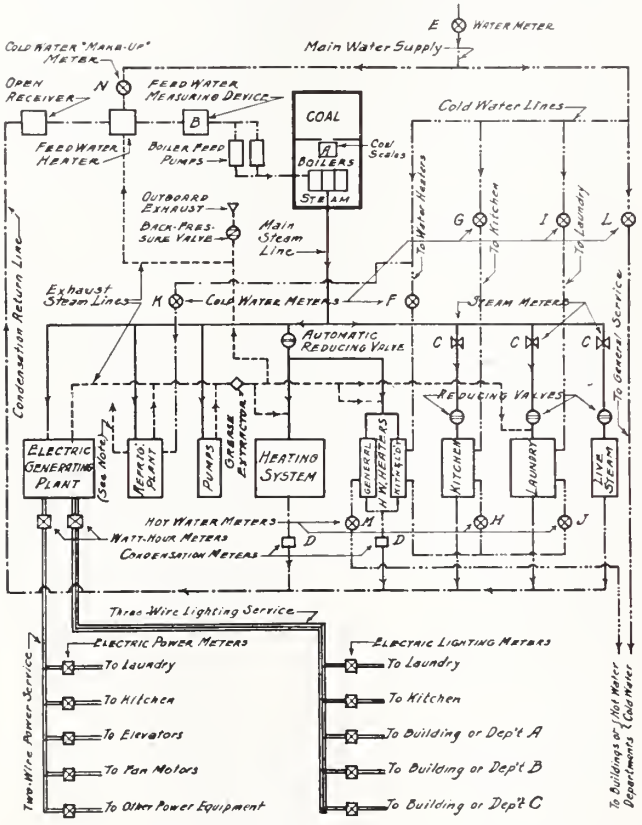
PROBLEM OF APPORTIONMENT

With our scheme evolved, we are far from providing the means of its application. It is, indeed, an involved problem.

There is this serious objection to any plan of approximation. No real check of efficiency is obtained, and no premium is offered for the economical operation of any department, wastes of one or more departments being averaged over all departments. Hence the value of an exact method of accounting.

Let us briefly scan some of the difficulties encountered in undertaking the exact accounting: For instance, the fuel is used all at one point (under the boilers). The steam thus made is used in heating the building; in heating water for various uses and departments—as live steam for the laundry, kitchen, sterilizers, and drying; for making electricity for light, power, x-ray, secondary systems, and elevators; and for operating the refrigerating plant. In the case of a hospital having its own electric power plant the greater proportion of the steam is used twice—

CHART 1. SHOWING INTERRELATION OF POWER PLANT SERVICES.



NOTES ON CHART

In case of insufficiency of exhaust steam for the heating of feed water, a supplementary supply of live steam is furnished through the connection between the live steam and exhaust steam connections to the heating system.

The live steam service to the right of the chart is intended to provide steam for sterilizers, blanket warmers, bed pan warmers, steam tables in diet kitchens, etc., and for auxiliary heating in Operating Rooms, Recovery Rooms, Maternity Department and Nursery.

Pumps include boiler feed pumps, vacuum heating pumps, domestic cold water supply pumps, hot water circulating pumps, elevator pumps, air compressors, vacuum pumps, etc., the steam used in these pumps being estimated and charged to proper departments.

The electric power feeder marked "to other power equipment" is intended to include that required for vacuum sweepers and other auxiliary electric equipment.

If the refrigerating machine is operated by electric motor a separate feeder line with meter should be provided therefor.

Cold water required for sterilizers, stills, vacuum sweepers, etc., will be supplied from the general service cold water line. The water leaving the refrigerating machine, i. e., that used for condensing and jacket cooling, may be used in the hot water supply system, as "make-up" water for the boilers, or in the general cold water supply.

If a steam driven stationary vacuum sweeping plant is installed its steam consumption must be determined as in the case of pumps. If operated by electric motor, its electric current consumption may be metered.

first as live steam in the engines, and then in the form of exhaust steam for heating the buildings, and heating water. This second use of the steam, mixed automatically with other live steam further compounds confusion.

Parenthetically, it may be stated that the value of this exhaust steam upon leaving the engine is not in the least diminished as a heating medium, although all engineers do not appreciate this fact. Therefore, there is no practical reason why any charge for fuel should be made against the production of electricity for lighting, power, x-ray, secondary electric systems, and elevators during that period of the year in which all of the exhaust steam may be so used. This will generally be found to cover the period from October 15 to April 15. During the balance of the year a certain amount of fuel must be charged to electric current production, bearing in mind that even then much of the exhaust steam may be used for heating water and, in some cases, for warming and drying.

In the same manner as in the case of fuel, labor enters into the cost of heating, water (hot), electricity, and repairs.

Chart I is intended to show the interrelation of the various power plant services. Fuel and water are fed to the boilers and steam is there produced. It is thence distributed to the various services, as indicated. Capital letters (in parentheses) in this text refer to the same letters on the chart.

METHOD OF EXACT APPORTIONMENT

First, let us not use the term "exact" too literally, for certain assumptions are inevitable, but the extent of such assumptions may be limited so that a reasonable degree of accuracy may be obtained.

The real problem lies in the means of obtaining the necessary data to make possible the apportioning of the "major accounts" into the "service accounts." Let us take the "major accounts" in the order listed above.

Fuel—For apportioning the fuel cost the following basic information must be secured: (a) Total amount of fuel burned. This may be determined by re-weighing the coal as burned on the boiler room coal scales (A); (b) Total pounds of steam evaporated by the boilers. This is to be determined by means of a boiler feed water measuring device (B), or by the use of steam meters; (c) The distribution of steam. This is to be determined by the use of steam meters (C), and condensation meters (D), which should be so installed as to record the amount of steam supplied to the heating system, hot water tanks, laundry, kitchen and sterilizing system, the steam used in the refrigerating and electric plants being determined as later explained.

The total of the readings of the steam service and condensation will be less than the total of steam produced in the boilers by the amount used in the electric plant (little or none in the winter and more in the non-heating months).

A word as to the use of meters, especially the steam and condensation meters. We all recall the days when water and electricity were sold at, so-called, "flat rates." Today such a thing is almost unknown. Every building has its water and electric meters, and, customarily, every apartment in apartment houses has its own electric meter. The cost of water meters and electric meters is so small that no excuse can be offered for their non-use in hospitals.

Steam, as furnished by district heating and power plants, has here-to-fore been sold at "flat rates." Now condensation meters are used, and the steam meter is becoming more and more in evidence. The latter has

now been developed to a point of reasonable accuracy under extreme variations in loads and other conditions, and its cost is not, generally speaking, prohibitive. Only in a small hospital, may it be so regarded. It is largely because of a general lack of appreciation of the desirability of accurate accounting, and of the tremendous possibilities of effecting economies resulting there-from, that the use of water, electric, and steam meters has been so seriously neglected. Also, the frequent "paring down" of the cost of the mechanical equipment, regardless of its effect on economy of operation, has been largely responsible for the omission of these meters.

The fuel burned under the boilers is used to produce steam, and the cost of this fuel is to be divided among the various "service accounts" in the proportions in which the steam is distributed to the various services, as indicated by the steam and condensation meter readings.

Water—In relatively few instances is water now furnished free to hospitals. A water meter is usually applied to the service main, and the gross cost of water is a known amount. The distribution of the water cost may be determined by the use of local service water meters.

Water meters should be applied to the boiler "make-up" supply (N), to the cold water connection to the hot water heating tanks (F), to the kitchen mains (hot and cold water), (G and H), laundry (hot and cold water) (I and J), to the water supply line to the refrigerating plant (K), and to the general supply mains for cold and hot water (L and M).

The cost of new water ("make-up") supplied to the boilers (as determined by a water meter N), and also the cost of repairs and supplies for the boiler plant and its auxiliaries, must be divided and charged into the "service accounts" of heating, hot water, kitchen, laundry, electricity and refrigeration in the same proportions as the fuel is charged, these being an element in the cost of producing steam prior to its destribution. The cost of steam used in heating boiler feed water is to be similarly divided.

In the case of the hot water it appears necessary to have one general account for hot water, embracing a charge for fuel (in proportion to the steam used in heating the water), labor, water, repairs, and supplies, because all of the hot water is usually heated at one point. This account may then be sub-divided into the separate "general supply," "laundry," and "kitchen" accounts as indicated by hot water meters (H, J, and M), installed on the mains supplying each department.

Electricity.—Where electricity is purchased its total cost is directly known. Where produced by means of an isolated plant the cost of electricity is made up of fuel, water, labor, repairs, and supplies. The fuel and water costs incidental to the production of electricity will be in proportion to the steam used in the generating plant. With the total amount of steam produced known (by means of the feed water measuring device B) and the steam used in all other services determined, as explained, the remainder of the steam is chargeable to the generating plant. Repairs and supplies as applied to the electric plant are readily segregated.

It is suggested that the portion of the total labor cost to be charged against "electricity" should be that represented by the cost of the excess labor required for the operation of the electric plant over and beyond the cost of labor if no electric plant existed. It is believed that this may be determined with reasonable accuracy. The cost of such labor will usually be found to be small.

The cost of electricity is, therefore, made up of the following items: (1) fuel—a proportion of the total cost of fuel equal to that proportion of the total amount of steam charged to the electric plant; (2) water—the same proportion of the cost of new ("make-up") water supplied to the boilers; (3) labor—the excess cost of labor over that required if no electric plant were operated; (4) repairs—those applied directly to the electric generating plant, at cost, and a proportion of those applied to the boiler plant and its auxiliaries in proportion as steam is charged; and, (5) supplies—charged as stated for "repairs." See Item (4) above.

Because the proper charge of these items against electricity is the subject of later determination, it seems best that all fuel, water, labor, etc., should first be charged to their respective "major accounts," counter-charges and credits being made, when determinations make this possible.

Assuming the total cost of electricity to be thus determined, and the total kilowatts of electric current produced to be known by means of the main switchboard meters, the cost of each kilowatt of electricity is readily determined by dividing the total cost, expressed in cents, by the total kilowatt hours of electric current produced. Electric meters should be applied in the electric service mains serving each department in which the cost of operation is desired. As a rule, all motors, including those driving ventilating fans, are on power mains, and the current used is metered as a whole.

The current used for power in the laundry and kitchen should be separately metered. So also should that used for driving ventilating fans, as this should be charged to the heating account. In a new institution the wiring system may be so designed as to make this method of recording simple, otherwise approximation, as referred to below, may become necessary.

Labor.—Labor cost as chargeable to electricity has already been discussed. The labor to be charged to "repairs" may be made a matter of direct record (see below). The remainder of the labor cost should be divided and charged to the heating, hot water, kitchen, laundry and refrigeration accounts in proportion as the cost of fuel is charged to these five services.

Repairs.—Repairs involve materials and labor. Only a definite system of records is essential to proper accounting of the cost of repairs. The use of "Repair Record Sheets" as used at the Massachusetts Homeopathic Hospital will make this a simple matter. The "Repair Record Sheet" is reproduced on the page following.

Supplies.—A similar system applied to the purchase and distribution of supplies will assure a proper accounting of the cost of supplies. Where supplies are bought in bulk for all departments, the cost should first be charged into the "supplies" account, being credited to it and then charged to the various service accounts as used.

If the above method of cost determination appears complicated, may we suggest that, if such meters as have been mentioned are available, the accounting becomes a relatively simple problem? Many phases of hospital accounting are vastly more complex and laborious, and are of less moment in that they offer much less opportunity for the promotion of efficiency and economy.

APPROXIMATE METHODS OF APPORTIONMENT

The above method of apportionment may not be applicable to the majority of hospitals as we find them for the reason that meters are not available, and the piping and wiring systems may be such as to make the installation of the meters difficult and so expensive as to be prohibitive.

Fuel.—To apportion the cost of fuel, the amount burned at the boilers must be determined as in the exact method, and the pounds of steam made, as well as its distribution, must be determined by approximation if no other method is possible. The amount of steam made may be approximately determined by tests made quarterly or more frequently in order to determine the average operating efficiency of the boiler plant; and by multiplying the total number of pounds of coal burned during a given period by the number of pounds of water evaporated per pound of coal, as shown by the tests.

Afterwards, tests may be made in which the steam condensed in the heating of the buildings, in the heating of water, and that used for sterilizing, etc., is weighed. This will serve as a guide to the amount of fuel used.

To be informative, these tests should be made on all services simultaneously, from time to time, and under different load and weather conditions.

The determination of the cost of fuel used for heating might be made in proportion to the cubic contents of the various buildings or departments; or in accordance with the number of patients accommodated; but the nature of the use of these different departments is so varied that neither of these plans is to be commended.

Possibly the best method of approximation of the cost of fuel for heating is to charge against the heating a certain amount of coal per square foot of radiating surface as installed. Assuming that a building is equipped with a steam heating system in a climate where a minimum outside temperature of zero prevails we would allow 100 pounds of coal per square foot of radiation as an average for the entire heating system, although records of hospitals vary from 75 to 140 pounds. For a hot water heating system, allow 60 pounds as one square foot of direct steam radiation. For other than zero minimum temperature correct these figures in proportion as outside and inside temperature differences vary from 70 degrees.

There are various forms of radiation surfaces and these should all be made the equivalent of direct steam radiation by the use of the following factors: Direct steam radiation, 1.00; direct-indirect, 1.25; indirect (gravity), 1.50; fan coils, 6.00. The fuel consumption of hot water heating surfaces is to be rated as 60 per cent of that of steam services.

The figures given for fan coils should be reduced in proportion as the number of hours of use per day is to 24, if this surface is not in use continuously.

This plan of fuel approximation will correspond to the general results obtained in hospital heating plant operation. Of course some heating plants are more economically operated than others. As in the case of any plan of approximation the opportunity for promoting individual departmental economies in heating is absent.

Fuel to be charged to water heating may be determined by means of the following formula:

$$\text{Pounds coal} = \frac{\text{Gallons} \times 8.33 \times (T-t)}{8{,}000}$$

, in which gallon equals gallons of water heated; 8.33 equals transfer of gallons to pounds of water; T equals final temperature hot water—usually 120 to 180 degrees; t equals initial temperature cold water, usually 40 to 50 degrees; 8,000 equals B.T.U. per pound of coal transferred to steam. (It may be more or less according to quality of fuel used, and the efficiency of boiler plant operation.) This will give approximately 11.5 pounds of coal for each 100 galgons of water heated from 50 to 160 degrees.

A water meter is desirable to measure water passing through the hot water tank, and thermometers (preferably of the recording type) should be provided to determine the temperatures of the incoming and outgoing water. Otherwise, an approximate estimate of the volume of water may be made as suggested below in connection with water distribution—water used per fixture.

Part of the steam used in the kitchen is condensed in the appliances in which it is used and is returned as hot water to the boiler plant. The amount of this may be

REPAIR RECORD SHEET

Requests for Repairs should be signed by the Department Head or Head Nurse.

Classify by Departments as indicated below, and send to Superintendent for approval before 9 a. m.

Repairs requested and not made within a reasonable time should be again requested, using PINK blank.

CLASSIFICATION OF REPAIRS

CARPENTER	ENGINEER	PAINTER
Awnings	Cold Storage	Glass
Baskets	Electrical Apparatus	Floors
Bedside Tables	Elevators	Painting
Bedsteads	Gas	Plastering
Brick Work	Heating	Varnishing
Casters	Iron Work	Window Cords
Curtains	Lights	
Doors	Machinery	
Doorchecks	Metal Work	
Dumbwaiters	Plumbing	
Furniture	Refrigerators	
Locks	Sterilizers	
Marble Work	Surgical Repairs	
Roof Work		
Screens		
Tile Work		
Upholstery		
Woodwork		

Mechanical departments should make no repairs other than emergency, except on approved requisitions, and should give cost of time and material on all work performed. Return requisitions promptly to bookkeeper upon completion of repairs.

REVERSE SIDE OF REPAIR RECORD SHEET

Read Reverse Side DATE _____

_____ DEPARTMENT

REPAIRS ARE REQUIRED AS FOLLOWS:

_____ _____

Signed *Approved*

No.	*Description*	*Place*
1		
2		
3		
4		

COMPLETE DATE BY

No.	*Materials*	*Value*	*Time*	*Total Cost*
1				
2				
3				
4				

determined by weighing. Other steam is used in vegetable cookers, etc., which is not so returned and the amount (not large) must be estimated. Manufacturers of kitchen apparatus can furnish data as to the steam consumption of such apparatus, but the variety of kinds and sizes makes a statement impracticable in this paper. The duration of the period of daily use of this apparatus also has a determining effect upon its steam consumption.

With the quantity of steam used in the kitchen determined, the coal to be charged to the kitchen is arrived at by dividing the pounds of steam by a figure corresponding to the pounds of steam evaporated per pound of coal fired to the boilers, assumed, or determined by the tests above suggested.

In the laundry the most of the steam is condensed and returned to the boilers; but some steam may be used directly in heating water in washers, tubs, etc., and the amount so used must be estimated. Manufacturers of laundry machinery can furnish data as to the steam consumption of their apparatus, which varies with the type, size, and hours of use. Pounds of steam may be converted to pounds of coal as suggested above for the kitchen.

Steam, and thus fuel, used in the refrigerating plant can be calculated by engineers familiar with refrigerating machinery operation, or from the manufacturers of such machinery.

When steam pumps are in use, a further problem is involved. The figure quoted above as to the coal consumption in the heating system includes any steam used in operating condensation return pumps and heating system vacuum pumps. The steam used in other pumps may be calculated with reasonable accuracy. It should be borne in mind that the exhaust steam from the condensation return pumps and the heating system vacuum pumps will always be used in the heating of the buildings and in heating water, and the exhaust steam from other pumps may be largely so used.

Under average conditions, eight pounds of coal are required to produce one kilowatt of electric current. During the summer months, when the exhaust steam is but little used (for heating water only), coal may be charged to electric current production at this rate: The amount should be reduced as the exhaust steam becomes used for heating until no fuel is charged when all of the exhaust steam is utilized.

There are some steam losses in transmission and in leakage. An addition to the fuel to be charged to each service should therefore be made to cover this loss. Five per cent should be a generous allowance for this purpose.

After one has determined the fuel to be charged to heating, to heating water, to the kitchen, laundry, refrigeration, and pumps, the remaining steam, manifestly, is chargeable to electric current production if an isolated plant is used. If no electric generating plant is operated, the total amount of fuel should be divided among the other services above mentioned.

Water.—If water meters are not provided, the cold and hot water consumption, and as a result, its cost, may be approximately divided in proportion to the number and character of fixtures, the rating being as follows:

Water consumption.	Gallons per hour	Rating
Lavatories and sinks	10	1
Baths	20	2
Showers	40	4
Water closets	20	2
Urinals	10	1
Dish washing machines	40	4
Urns	5	.5
Cookers	10	1
Washers (laundry)	50–100	5–10
Soap and starch kettles	10	1

These figures may be varied, especially with reference to cookers and washers, according to the size of each piece of equipment and the frequency and duration of periods of use.

It is generally assumed that 40 per cent of the water used in lavatories, baths, and showers is hot water. For other apparatus requiring hot water it is assumed that 70 per cent is the correct proportion.

Electricity.—If electric meters are not provided on the electric mains supplying the various services, the division of electric current may be made in proportion to the connected load in each department, modified in proportion to the hours of service in each case. Or, the electric current consumption for the different services may be readily measured by the use of a portable meter.

The tests on the different departments might better be made simultaneously, but this would involve the use of several meters. Otherwise, the measurements should be made in such a manner as to determine the "average" load in each department.

"Labor," "repairs," and "supplies" should be charged into the various service accounts as outlined under the heading of "Method of Exact Apportionment."

A study of certain hospitals suggests the following annual transfer of certain of the "major accounts" to the "service accounts." The tests above mentioned may modify these slightly.

	A Fuel	B Water	C Electricity	D Labor
a. Heating	Note a	4	..	75 (Note b)
b. Cold water	..	30	..	..
c. Hot water	24	20	..	3
d. Kitchen	30	11	10	6
e. Laundry	20	18	30	10
f. Lighting	14	7	50	.. (Note c)
g. Power	6	3	20	.. (Note c)
h. Refrigeration	6	7	..	6
i. Repairs	..	..	..	.. (Note d)

(Note "a"). The fuel to be charged to heating is assumed to have been charged on the basis of 100 pounds of coal to the square foot of direct steam radiation, as above suggested. The percentage figures for fuel relate to the balance of coal consumed for other purposes than heating.

(Note "b"). The greater portion of the labor cost is chargeable to heating, inasmuch as it is the principal service rendered by the labor.

(Note "c"). The labor cost charged to electric current production is assumed to be determined in the manner suggested.

(Note "d"). Repair labor is assumed to have been directly charged to the proper service account.

The remaining labor cost after deducting that charged to electric current productions and repairs is to be divided according to the percentages given.

Through the cooperation of the engineering and accounting departments of a large number of hospitals, this plan may be developed and improved. The admirable accounting systems in use in some of our hospitals, such, for instance, as that devised by Mr. V. S. Thorne, of the Presbyterian Hospital, of New York, is illustrative of what may be accomplished. A thoroughly developed system would prove helpful to many hospitals and would constitute another advance in the hospital field, especially in reducing wastes, and in effecting other appreciable economies of the utmost importance in this period of high costs.

MONTHLY RECORDS

In the above, annual records have been discussed. If a monthly division of accounts is desired it may be made as follows:

Heating costs are incidental to the months of the heating season only. Cold water should be distributed evenly over the twelve months, except as it is used for lawn sprinkling during the summer months.

Slightly less hot water may be used in the summer months, and cooking and laundry work would be less expensive during the summer months.

Lighting is a relatively small factor in summer, but the electric power consumption, aside from that used to drive ventilating fans (which is charged to the heating account)

varies but little from month to month in the net cost. It is obvious that refrigeration is much more expensive during the summer.

Where meters are provided for exact determinations, monthly records are readily possible. Otherwise an approximation only is possible. For such cases the following table is offered for the division of the annual costs into monthly costs, the figures indicating a per cent of the total:

	Heating	Hot Water	Kitchen	Laundry	Lighting.	Power	Refrigerator
January	18	10	10	10	16	9	4
February	16	8	9	9	13	8	4
March	12	9	9	9	10	9	5
April	9	8	8	8	7	8	6
May	5	8	8	8	4	8	8
June	3	7	7	7	3	8	11
July	..	7	7	7	3	8	16
August	..	7	7	7	3	8	15
September	3	7	7	7	5	8	11
October	7	9	9	9	8	8	9
November	11	10	9	9	13	9	6
December	16	10	10	10	15	9	5

SEPARATION OF BUILDING ACCOUNTS

Where there are a number of buildings, some of them possibly administered under separate funds or endowments, it may become necessary to so divide these "service accounts" that the proper proportion shall be charged against each building. The application of steam, electric (light and power), and water (cold and hot) meters makes such a division a simple matter in-so-far as it relates to the "service accounts" of (a) heating, (b) cold water, (c) hot water, (f) lighting, and (g) power.

SEPARATING CHARGES BY APPROXIMATION

The division should be made according to that proportion which the local meter readings bear to the readings of the meters at the point of original production—the meter on the boiler feed supply, or the meters on the main steam lines in the case of the fuel, the main switchboard meters in the case of lighting and power, the water meters at the main feed line, and at the hot water tanks in the case of the cold and hot water services.

Lacking the meters, the apportionment of the "service accounts" of heating, cold water, hot water, lighting, power, and refrigeration may be divided according to the methods above suggested for "Approximate Methods of Apportionment."

The original survey for the purpose of determining these divisions of cost may be somewhat laborious, but once made the work of accounting is simple, much less involved, in fact, than are other phases of hospital accounting.

PERCENTAGE BASIS IN COST ACCOUNTING

Especially is this true if the results obtained are reduced to a percentage basis. The Massachusetts Homeopathic Hospital follows this method, but as certain of its buildings are supported in part by individual endowments it apportions its power plant expense to these rather than to departments or items, each building being charged separately under various other heads for its laundry and for the food furnished its patients, nurses, and employees.

During the month of January (1919) this hospital consumed 815,000 pounds of coal. Having determined the equivalent of direct radiation in each building and assuming that 67 pounds of coal would be required per square foot of radiation for the heating season (an amount considerably less than average, but apparently justified by the results obtained), and that 18.62 per cent of this 67 pounds would be required for this month as per Table 5, Table 1 was computed, and the results reduced to a percentage basis.

TABLE 1. STEAM HEATING

	Square feet	Pounds of Coal	Per cent
Main Hospital	11,600	144,701	33.62
Robinson Building	7,500	93,526	21.73
Evans Building	6,500	81,088	18.84
Vose Hall	4,500	56,724	13.04
Hotel Newton	2,500	24,920	5.79
Newton Home	850	10,760	2.50
Stoughton Hall	800	9,942	2.31
Female Help's Hall	750	9,340	2.17
Total	34,500	430,401	100.00

During this month 23,840 kilowatt hours of electricity were generated. Assuming that eight pounds of coal would be required to generate one kilowatt hour of electricity, if the exhaust steam were wasted, but that 85 per cent of the steam would be available for heating after having performed its work in the engine, and knowing the consumption of electricity in each building, Table 2 was prepared.

TABLE 2. ELECTRICITY

	Kilowatt hours	Pounds of Coal at 1.2 per Kilowatt hour	Per cent
Main Hospital	11,490	13,788	48.20
Robinson Building	6,000	7,200	23.17
Evans Building	2,750	3,300	11.51
Vose Hall	1,200	1,440	5.04
Hotel Newton	200	240	.84
Newton Home	700	840	2.94
Stoughton Hall	600	720	2.52
Female Help's Hall	600	720	2.52
Male Help's Hall	300	360	1.26
Total	23,840	28,608	100.00

The total amount of coal required to supply live steam to the buildings was regarded as the amount remaining, and Table 3 was made up from the known consumption of each.

TABLE 3. LIVE STEAM

	Pounds of coal	Per cent
Main Hospital	269,991	75.85
Robinson Building	40,000	11.24
Evans Building	20,000	05.61
Vose Hall	10,000	02.82
Hotel Newton	2,000	00.56
Newton Home	4,000	01.12
Stoughton Hall	4,000	01.12
Female Help's Hall	4,000	01.12
Male Help's Hall	2,000	00.56
Total	355,991	100.00

Table 4 is a combination of Tables 1, 2, and 3, and these percentages are employed in computing the amount of the *entire* power plant expense to be charged to each building, the cost of the labor employed in the power house, and of all supplies bearing the same relation to each building as the fuel expense.

TABLE 4. COAL CONSUMED

	Heating	Power and Lighting	Live Steam	Total	Per cent
Main Hospital	144,701	13,788	269,991	428,480	52.67
Robinson Bldg.	93,526	7,200	40,000	140,726	17.26
Evans Bldg.	81,088	3,300	20,000	104,388	12.80
Vose Hall	56,124	1,400	10,000	67,564	08.29
Hotel Newton	24,920	240	2,000	27,160	03.34
Newton Home	10,760	840	4,000	15,600	01.91
Stoughton Hall	9,942	720	4,000	14,662	01.80
Female Help	9,340	720	4,000	14,060	01.74
Male Help	....	360	2,000	2,360	00.29
Total	430,401	28,608	355,991	815,000	100.00

For more exact accounting in subsequent months similar tables have been prepared for each, the amount of coal required for the heating month per square foot of radiation having been determined in accordance with Table 5.

TABLE 5. MONTHLY PERCENTAGE OF SEASON'S HEATING DEMAND

January	18.62	July	.00
February	17.37	August	.00
March	14.68	September	.00
April	10.31	October	7.09
May	3.29	November	10.76
June	.00	December	17.88

As the consumption for heating during those months in which all the exhaust steam could be profitably employed varied but little, three tables, one for the non-heating months, one for those in which but part of the

exhaust steam can be used, and one for the winter months, would practically serve as well; or even a single table giving the coal consumption for the entire year, as Table 6, may be used.

TABLE 6. YEARLY CONSUMPTION OF COAL IN POUNDS

	Heat	Light and Power	Live Steam	Total	Per cent
Main Hospital	777,126	507,415	3,144,151	4,428,692	58.97
Robinson Building	502,289	264,973	465,923	1,233,185	16.42
Evans Building	435,487	121,169	232,547	789,203	10.51
Vose Hall	301,419	53,057	116,896	471,372	6.27
Hotel Newton	133,835	8,843	23,213	165,891	2.21
Newton Home	57,787	30,950	46,426	135,163	1.80
Stoughton Hall	53,396	26,529	46,426	126,351	1.69
Female Help	50,161	26,529	46,426	123,116	1.64
Male Help	.....	13,264	23,213	36,477	.49
Total	2,311,500	1,052,729	4,145,221	7,509,450	100.00

Note.—In this table the amount of coal assigned to the production of electric power and light ranges from 1.2 pounds to 8 pounds per kilowatt hour.

VALUE OF ACCOUNTING METHODS

The value of a systematic accounting of power plant operating costs is especially urged because of the possibilities it offers as a means of promoting economies in the various departments of the hospital, especially when the exact method of accounting is used.

It is stating it mildly to say that the intelligent use of such a system would effect economies in any and every hospital sufficient to pay, yearly, the cost of installing all of the necessary meters and the cost of establishing and maintaining the accounting system.

The installation of boiler room scales and boiler feed water measuring devices alone has been known to increase the operating efficiency of a boiler plant from a standard of 51 per cent to 71 per cent, representing a fuel economy of 40 per cent.

Departmental wastes, especially in the laundry and kitchen, are proverbial. How else, than by such a system as proposed above, can they be checked?

A record of the cost per thousand pieces or per hundred pounds of laundry work would provide a constant measure of efficiency in the operation of the laundry.

The exact determination of the cost of cooking, per meal or per patient, would serve a similar end.

The collection of further data may serve to modify and improve the plan herein proposed. The authors would appreciate suggestions and data of help in developing and improving the plan offered.

Hospital Bed Transformed Into Racing Car

His indomitable sense of humor kept him up. He had the worst fracture in the ward. But he knew cars from Alfalfa to Omaha, as O. Henry would observe. Gasoline was his middle name. When they put a frame over the foot of his bed to keep the covers from touching his leg the white sheets formed a hood, unmistakably of a long, low racing car—white with gold trimmings—"the kind ya drive sittin' on the back o' ya neck," he explained. He was challenging De Palma at Indianapolis. Humoring him, the Red Cross man brought him a klaxon, whose stentorian presence caused more than one nurse that passed his bed to stop suddenly and, clutching her medicine bottles, look quickly about her with scared eyes, to the huge amusement of the ward.

"Little girls like you oughtn't to cross the street all by y'r lonely, where nasty automobiles can run over ya!" he teased.

The make-believe chariot varied with his humor. Sometimes it was a Ford bouncing over tortuous roads, or it was a Rolls-Royce, absolutely!

Ward No. 7 was dull when he went, even if the klaxon did bring down anathemas upon his head.

AGAIN—THE QUESTION OF FIRE HAZARDS IN HOSPITALS*

Statistics Indicate Alarming Conditions—Necessity of Immediate and Effective Remedies—Extinguishers, Automatic Sprinklers, and Resistive Construction Suggested

By MISS LLOYD MARSHALL, Chairman of the Committee on Schools, Hospitals, and Penal Institutions, of the National Fire Protection Association, New York City.

The subject of fire conditions in hospitals and their remedies cannot be discussed too seriously or too much, since the situation is as grave as it is, and I am very glad, therefore, to discuss Mr. Crow's paper on Fire Hazards in Hospital Buildings.

What little I may add, will probably not be as popular as the opinion held by Mr. Crow for I think he has greatly underestimated the dangers of existing conditions, rather than overestimated them.

Yesterday I met a very interesting man who upon hearing that I was interested in the fire conditions in hospitals, said, "Well, I only hope you are not going to ride the hobby which 'so-and-so' has ridden for such a long time, are you?"

"What is his hobby?" I asked.

"He thinks," he replied, "every hazard will be corrected if fire walls are built dividing the floor area."

Another man recently asked me: "Are you going to cram sprinklers down our throats?"

And yet another man, who is not only a serious worker in the field of hospital service, but one who has given much thought and attention to bad and good fire conditions, said to me: "Our town had a large fire some time ago, and everybody got quite excited about having drills. A group of worthy citizens came to us requesting us to have regular drills, and, because I, too, thought it might do some good, I gladly agreed to try it. The effect of the gongs, low-toned though they were, and of seeing the nurses and other attendents quietly take their places, had a most serious effect on many of our patients. Mind you, they had been warned three or four times that a drill would occur at 1 o'clock, and that it would not mean a real fire. And yet in spite of that they were alarmed. No, drills are not safe or practical for hospital use."

Of course, I cannot omit entirely all mention of fire remedies, since, after all, the remedies are what we need in order to omit the fires.

America's hospital and asylum fire loss in 1917 was 607 buildings in which fires actually occurred. (The 1918 figures have not yet been compiled). Do you fully realize what it means to have 607 fires a year in hospitals and asylums? It means that we are averaging *eleven fires a week* throughout the year! And bear in mind, these 607 fires are only the reported ones and the fires in buildings which were insured. Since every building is not insured, and since many hospital authorities do not want to have it known that they have had a fire, the real total number of fires must go far beyond this figure.

We have throughout the county, 7,100 buildings, including all kinds, used as hospitals. Figuring the total number of yearly fires among the seven thousand buildings, again we see that we are having yearly one fire to every eleven buildings. This places hospitals in the same class as the most dangerous buildings which we have—cotton mills, oilcloth plants, and others which house dangerous occupations. (Continued on page 418.)

*This article is a discussion of Mr. Crow's paper on "Fire Hazards in Hospitals," which appeared in the October issue of The Modern Hospital, p. 265.

Just what do these terrible figures really indicate? Are many lives actually lost? Are these 607 fires, large hospital fires? Last year there was a fire in the State Hospital for the Insane in Oklahoma, in which thirty-seven white men and one negro were burned to death! Last year in the Grey Nunnery in Montreal, fifty little children were cremated, and countless nuns and many wounded soldiers, returned from the great war, received horrible burns in doing heroic work to save as many lives as possible. Last February, fire destroyed a large hospital in Central Missouri—the only one of its kind—and the financial loss was $150,000. These are but three examples: of course, the entire list is much too long to quote, and my time is too limited to cite more cases.

This shocking condition should be changed as soon as possible—which means immediately. Hospital authorities should have an investigation of their buildings made by a fire prevention expert and should then take immediate steps to carry out his recommendations. Of course, I am not supposing that nothing has been done and that the hospital authorities are not interested in this vital question. It is because I know that they are interested and because the subject is so serious, that I am trying to bring out a few facts which may not be known generally.

For what does it mean to have eleven hospital fires a week? Even if no lives are lost, even if the financial loss is not great, it means that, weekly, we are placing a terrific nervous strain on patients, doctors, superintendents, and nurses! The Census Bureau gives the total number of patients in all hospitals in 1910 as a little under two million. This is another way of saying that, weekly, about two hundred thousand patients—to say nothing of doctors, nurses, superintendents, and all others working for them—are threatened with danger, shock, and exposure!

Besides this, every building used for such purposes is needed, and even a temporary cessation of this most humane work on earth is a loss impossible to estimate. Do we not owe our country as a whole, as well as our individual people, absolute safety while in our mind-and-body-strengthening institutions? We lost on the battlefields of France during the great war, about fifty thousand men. Yet, year after year, America kills fifteen thousand men, women, and little children by fires alone. In less than three and a half years, we will go beyond that war loss, and yet this life loss from fires will go on indefinitely if not stemmed by effective remedies.

You must know from your own experiences many of the plainest, the best known hazards, and in Mr. Crow's paper, the subject is most effectively covered. In his opinion, many of the buildings now used as hospitals and asylums are so poorly built and contain so many hazards that they should not be repaired, but should be completely torn down and replaced by modern, well equipped buildings. This is my opinion, too, but, unfortunately I know there are few boards of managers in such a financial position as to be able to make this possible. Funds are nearly always limited, and calls upon them are great.

Yet something should be done. Something must be done immediately. How can we retard fire, and so give a fairer chance at saving lives? How can we reduce the ever recurring eleven fires a week? You have heard already that fire escapes are of little good to hospitals. Indeed, I have heard an authority state that outside fire escapes are the sure evidence of bad conditions within. Besides, fire escapes are most impractical for hospital use.

If one fire wall (or possibly two) can be built to divide the floor area, that will save part of the building temporarily, perhaps permanently, and will help to save human life. If hand extinguishers can be purchased in sufficient quantities, and the entire staff instructed in their use and care, they, too, will help. Automatic sprinklers installed at least in the basements and attics of hospitals, where they act as soon as there is a fire, unquestionably will save lives and property. I do not agree with Mr. Crow as to the danger of having them in the wards, since even a deluge of water is certainly preferable to burning to death; and I am told the sprinkler heads open only one at a time as is proved necessary according to the extent of the fire.

Of course, the right and proper condition for every hospital is that it should be built entirely of fire-resistive material, with sprinklers in the basements and in the attics. The word "fire-resistive" is used rather than "fireproof," since the former is more nearly correct than the latter. All boards contemplating a new structure should not even consider any other than absolutely fire-resistive construction.

These are but a few suggestions repeating Mr. Crow's own thoughts. Like most limited advice, it is both superficial and unscientific. Only a Fire Prevention expert who has spent years in the study of this one subject is able to advise in any adequate kind of way.

I have prepared for distribution a short leaflet on these conditions, and I shall be glad to send it to any who may want it. I am Chairman of the Committee on Schools, Hospitals, and Penal Institutions of the National Fire Protection Association, which is doing everything in its power to awaken the country, especially the women, to the urgent need of fire protection for our public and private institutions. I am in communication with women all over the country, and if any hospital executive would like to get the backing of the women of his community, if he will write to me I shall be glad to do everything possible to stir them to cooperation. I may add that the women will be especially useful in arousing public sentiment, in raising funds for improvements, or for any other service which women perform so fearlessly. But obviously, the first step should come from the hospital authorities themselves. Let us all unite to make America's fine institutions safe for Americans!

Nurses in State Hospitals Complete Training

Nurses in the state hospitals in Illinois are now completing the training which was interrupted by the war. Among the courses is the one in psychiatric nursing at the Chicago State Hospital, Dunning. Graduates are eligible to appointment to high salaried positions in the state hospitals.

In each of the state hospitals there is being organized a two-year course for qualified nurses. This grade is not recognized by law and does not lead to registration, but it is thought it will be recognized by the next general assembly. A six-months training for all students in state hospitals has also been inaugurated.

During this month, in anticipation of a possible recurrence of the influenza epidemic, each state charitable institution is giving a short course to all employees in the proper care of the physically sick patients. Women from the adjoining communities are also interested in this course, two hundred from the city of Kankakee being enrolled at the Kankakee hospital.

In order to meet the requirement of the new state nursing law that applicants for training must have one year high school, the state hospital at Jacksonville has

opened a day school. The pupils pay half the cost, and the state pays the other half. The teacher is provided by the superintendent of the city high school, who acts as supervisor. The hospital furnishes the class room and arranges the work so that the young women will have time to attend the classes. There are twenty in the first class. If the experiment proves successful, the plan will be taken up by the other state institutions.

HOW NATIONAL TUBERCULOSIS ASSOCIATION EXPANDS ITS SERVICE

Rapid Growth Results in Affiliation of Work With Other Organizations and Public Establishment of Comprehensive Medical Service Latest Development

By H. A. PATTISON, M.D., Special Adviser on Tuberculosis, Federal Board for Vocational Education, Washington, D. C.

The National Tuberculosis Association has grown very rapidly since the beginning of the war. Its executive staff has practically doubled, with a consequent broadening of its service to take in affiliated organizations and the public. The latest expression of its growth is the establishment of a medical service with a supervisor and four assistants.

Among the activities of the service are the following:

1. A study of the general problems of medical and nursing education as they relate to tuberculosis. An effort will be made to outline more intensive courses of studies in tuberculosis for medical students and secure their introduction to medical schools.

2. The organization of schools of tuberculosis for general practitioners. These will be located as rapidly as there appears to be demand for them in various sections of the country where physicians may wish to go for a vacation period and at the same time get intensive instruction in the early diagnosis and treatment of pulmonary tuberculosis.

3. Several state tuberculosis associations have appointed medical field secretaries who travel about their respective states holding special clinics, consultation, and conferences. The possibilities of such service by physicians will be studied by the National Association, which will act as a clearing house of information.

4. A study of tuberculosis nursing problems will be made and every possible assistance offered in correlating the nursing activities of such groups as the National Organization for Public Health Nursing, the American Red Cross, state and local boards of health, and the tuberculosis associations.

5. There will be established an advisory service in connection with the latest phases of sanatorium and post-sanatorium care and treatment which have developed to such advantage in dealing with tuberculous cases in the military and naval service in the United States, Canada, and Europe—viz, occupational therapy, vocational training, and placement.

6. Advisory service will also be offered to individuals, municipalities, counties, or states that contemplate the location, planning, construction, and equipment of sanatoria. This latter service is a natural outgrowth of much that has already been carried on by the National Tuberculosis Association for some years. In 1911 the association caused to be prepared and issued a handbook on "Tuberculosis Hospital and Sanatorium Construction" which passed through three editions, the last dated 1914, and has proved of great value as a guide to those charged with the responsibility of providing sanatorium accomodations. But the evolution of the sanatorium is very rapid and the "latest" to-day may be nearly obsolete five years hence. The association, therefore, will attempt to keep abreast of developments throughout the country, and without fees offer advice as to the hundred and one problems which arise when a sanatorium, large or small, is to be built, equipped, and maintained. Such points will be considered as the advantages or otherwise of contiguity to a town, climate, altitude, nature of site and soil, water supply, sewerage disposal, general arrangement and grouping of buildings, requirements for administration, infirmary, laboratory, dining and kitchen service, heating, laundry, and workshops. Help in establishing open-air schools and dispensaries will also be offered.

7. Special educational work in one of the army sanatoriums for the tuberculous has already begun. Through the courtesy of the Surgeon General, the National Association is privileged to cooperate with the commanding officer at Oteen, N. C., in providing courses of lectures for the patients, corpsmen, nurses and reconstruction aides. They will be taught the fundamental facts of tuberculosis, and this information, it is believed, will make the patients better satisfied to remain in the army until the maximum improvement is gained, and better equipped to care for themselves and protect their families when discharged. Capt. Benjamin K. Hays has recently been discharged from the Medical Corps of the army and sent to Oteen by the National Association for this service.

Mr. Thomas B. Kidner, for more than three years, secretary of the Canadian Civil Re-establishment Commission and then loaned for a year by his government to the Federal Board for Vocational Education, has been engaged as Institutional Secretary.

Miss Mary E. Marshall comes to the Association after a broad public health nursing experience, as the Nursing Service Secretary, with the endorsement of both the National Organization of Public Health Nursing and the American Red Cross.

A Medical Field Secretary is yet to be appointed. Dr. H. A. Pattison, for the past two years Medical Field Secretary of the National Association and for eight months following the signing of the armistice loaned to the Federal Board for Vocational Education as special adviser on tuberculosis, will have supervision of the medical service.

Combined Maternity Home and Children's Hostel

A new development with regard to maternity homes has been tried at Plymouth, and has met with so much success that an appeal is being made by Lady Beatty, Lady Maud Warrender, and Mrs. Mildmay to extend the benefits of the home and to enable naval maternity homes on similar lines to be erected at Portsmouth and Chatham. In addition to receiving the mother into the maternity home for her confinement, the younger children, whom of necessity the woman is unable to look after during the time she is in the home, are accommodated in a hostel near. It is estimated that the cost for the enlargement of the Plymouth branch will be £50,000, and £100,000 will be required to erect each of the institutions at the other two ports. The Navy League has promised to contribute £10,000 to each of the three ports, provided that £40,000 for each port is given by the public. In the appeal it is stated that "the Empire can acknowledge its debt to its sailors in no better way than by providing means whereby their wives can receive the best medical attention at the most critical moments of their lives, and whereby their children may receive proper care when their mothers are unable to give it."—*The Nursing Mirror.*

OUT OF THE GRANDSTAND INTO THE GAME

Competition in Recreational Contests Chief Aid in Helping Maimed Doughboys Overcome Handicaps— Even "Blinks" Need No Longer Occupy Bleachers

By CATHERINE OGLESBY, American Red Cross

The soldier-convalescent has been adopted by the Red Cross. The organization which has been active in stamping out typhus, cholera, and other epidemics dangerous to nations, has been solicited by the Surgeon-General to stop the progress of the epidemic "hospitalization," which is now spreading in military hospitals and which is so hazardous to the successful solution of the problem of physical and mental reconstruction challenging thousands of American youths.

The question of the convalescent has ever been a puzzling one to commanding officers and members of the medical and nursing staffs. Today the problem is greater than ever before. Fifty military hospitals are peopled with men sane and healthy, save that they have lost an arm, a leg, or eyesight. They want to shout, play, and throw cigarette stubs on the floor, for beneath their crash bathrobes still beats the irresistible, irresponsible, and impressionistic heart of the doughboy. At first their excess of virile spirits resents succumbing to "hospitalization," but their quick adaptability soon causes them to lapse into its characteristic lassitude, with an apathy toward progress and an unambitious view of life and industry.

Recreation is the cure afforded to this disease by the Red Cross. Passive entertainments, such as motion pictures, concerts, and theatricals have been conducted through the Red Cross convalescent houses for some time, but, about the time of the signing of the armistice, a plan for curative forms of recreation was adopted by the Surgeon-General and the Red Cross. The necessity of continuing passive entertainment was recognized, but the scope of recreational work was expanded.

A program, nation-wide, was planned by Dr. Elbert K. Fretwell, which provided for the introduction and direction of curative recreation in the reconstruction hospitals. The aim of the work was to initiate the patients into a desire for rapid recovery by arousing eagerness to overcome their handicap that they might become useful members of the army, navy, or citizen communities, capable of earning an independent livelihood; and to promote this end by awakening an *esprit de corps* in the institutions among the medical and nursing staff that they might be better fitted to perform their duties. The great goal was morale and its stimulation through active physical and occupational work.

Fig. 1. Instead of counting the cracks in the ceiling, the patients may now watch the movies.

The Red Cross Bureau of Military Relief placed two hundred trained recreational workers in the reconstruction hospitals, fifty band and orchestra leaders, fifty song leaders, fifty dramatic instructors, and fifty athletic directors. "Get out of the grandstand into the game" was

Fig. 2. The wheel-chair race of the much decorated jockeys.

their slogan, and to refusals of the patients, many of whom greeted the innovation with characteristic doughboy scepticism, they responded: "You may have lost your leg but you did not lose your courage, did you, Buddy? You're not 'out of luck' if you are in this. Get in the game!"

Competition was the secret of their success. At a certain hospital but forty enlisted for the games the first day of enrollment. Within two weeks the number was doubled, and at the end of six weeks 440 out of 600 patients were among the competitors.

The theory advanced in most modern recreation is to induce the component players to strive for a team spirit, for the success of the whole instead of for that of the individual. Recreation principles in the hospitals are directly opposite to these generally accepted theories. It is believed by the physical directors that the patients already have learned community spirit from the best and sternest of teachers, war. Their handicaps are individual, and they must, therefore, be eliminated by personal effort.

An especially fine system of competition was introduced in the Atlantic Division. Instead of having one game, the competition consisted of a series of games extending over a period of thirty days. Nineteen forms of recreation were included in the competition. The man scoring the highest in each of these was given a prize, and the winner of the highest total was presented with a gold watch. The prizes were of value relative to the amount of good the patients would obtain from the practice of the game.

The awarding of such prizes is generally made on a field day meet, and these gala occasions are red-letter days on the hospital calendar. All recreational pursuits may be seen on such days, as well as on holidays. On one such occasion at Fort McHenry, a one-armed baseball team won over a two-armed team each of whose members had one hand tied behind his back. At Fort Dodge a one-armed team played a one-legged team. Foot-ball is the favored sport of the one-legged men at Colonia, N. J. This is not played according to the popular conception of the game among persons who have a

complete assortment of arms and legs, however. Instead, a tennis net is stretched and over this the players try to kick the ball. Each time it goes over the net one point is scored, and twenty-one points constitute a game.

The amputation walk executed by one-legged men, is a popular game. This consists of walking a V-shaped track, picking up obstacles, stepping over articles. There is also the crutch race, and the wheel-chair race. The one-armed men are taken care of in dressing contests. In a recent contest of this sort one boy took off and

Fig. 3. Even the nurses and aides have their tugs of war.

wrapped his spiral leggings in three minutes, a task which would rival the skill of a two-armed man.

Even the "blinks" have a merry time. "Blink" is the doughboy translation of blind. No longer do they sit alone in the valley of the shadow, awaiting the whims of friends for entertainment. The Red Cross has ended that epoch. Now the "blinks" row, swim, play pool, billiards, bowl, and write letters on typewriters. The "lungers" no longer spend hours reading on the symptoms of their disease; and the shell-shocked indulge in competitive ball teams, baseball, which rouses them from concentrated apathy and transforms them into regular rooters.

"Show me" is the attitude of the Yank toward those who would encourage him to strive toward accomplishment of the seemingly impossible. Because of the doughboys' doubting attitude, the Red Cross employed Charles L. Wiebell as an athletic director for amputation cases. He is now at the hospital in Colonia, N. J., devoted entirely to this kind of cases. Wiebell has two wooden legs. He lost both his legs as a result of a railroad accident which occurred when he was a youth of twenty. But he was determined that he would not become a member of the soliciting street fraternity who haunt street corners awaiting the generosity of passers-by. After four weeks in the hospital he went forth in a wheel chair. Because of the personal experience which has assisted him in his knowledge of adjustments necessary to the comfort or efficiency of handicapped men, his work is extremely valuable at Colonia.

He has worked as a motorman on street cars in Philadelphia, and has been a supervisor of fifty-six looms in a silk factory. For nine years he was a traveling salesman, and carried two heavy grips about the country. There is no form of sport in which he cannot engage. He can even dance. Roller skating is the only accomplishment which has been beyond his powers. His triumph over his handicap is a constant stimulant to the boys who come to him with such remarks as "Only hitting on two cylinders, Cap." They shake their wooden legs with humorous appreciation of the queer sounds, full of faith that their athletic director will find a way for them to take part in the games.

This ability to laugh in the face of opposing fate will be found by the ex-soldier his most precious possession when he re-enters civilian life. Through play the sporting instinct, innate in every American, is being developed. Every doughboy has a splendid capacity for sportsmanship, and this dauntless defiance of foe and fate, stimulated by games, is enabling the blind and maimed to prepare themselves for their life and work. In the army they learned the value of morale; now they are learning that it is not a quality peculiar to the military. It is needed not only in the theatrical moments of life but in the every-day round of monotonous duties, and the recreation which the Red Cross gives as a cure for "hospitalization" is conducive to the cultivation of that will to win, grit to endure, and courage to laugh which is known collectively as "morale."

Work of the Ranyard Mission Nurses

Close to twelve thousand cases were cared for during the year 1918 by the eighty-four Sisters and nurses who comprise the staff of the Nursing Branch of the Ranyard Mission, London, one of the oldest of the voluntary nursing associations in England, founded in 1868.

These nurses attend patients of any denomination, but only those who are under the doctor's care. A complete course of training is required, which is supplemented by six months' work under an experienced Sister at the Central Hostel before the nurse is sent to the London district.

The work is supported by voluntary contributions so that salaries are not liberal—about 130 pounds a year for equipment and maintenance.

Fig. 4. Why worry about losing both legs when you can "shin" the pole anyhow?

THE STANDARDIZATION OF TUBERCULOSIS SANATORIUMS

Preliminary Draft of Report Presented by Committee Appointed by Mississippi Valley Conference—Urges Hospital Executives to Prepare for Inevitable Classification and Standardization

The Committee on Standardization of Sanatoriums, appointed by the president of the sanatorium section of the Mississippi Valley Conference last year, has carefully considered the subject matter, and, after a consultation with similar committees serving the American Sanatorium Association and the National Tuberculosis Association, desires to present its report.

It appears that in the near future the tuberculosis sanatoriums of this country will be classified according to fixed standards. Those of us interested in sanatorium construction and management may well anticipate this classification by others and make efforts now to present the proper showing when the examinations are made.

The committee feels that standards are necessary, and that a just classification is helpful to each member. They should assist many in acquiring improvements for the future which in the past have been denied.

The more the committee has studied this matter, the greater importance it has attached to a well-rounded and complete anti-tuberculosis program calling attention to the tendency of the public to rely too much upon the sanatorium alone for results which can be obtained only by a carefully co-ordinated and complete group of agencies, such as the visiting nurse, the dispensary, the follow-up system, and educational activities.

PRELIMINARY ORGANIZATION AND SUPERVISION

It is recommended that the immediate board of trustees shall consist of three or five members, especially qualified to serve, who shall be appointed by the county board or other official agencies, but who are not included in the personnel of the county board. At least one member of the board of trustees should be a licensed physician. Central state supervision over the construction and equipment of sanatoriums, and over matters pertaining to general management are recommended.

LOCATION AND SITE

1. It is recommended that a site be selected bordering on the city limits, with efficient transportation facilities (such as trolley or railroad), and also with city sewerage, gas, electric light, and telephone conveniently available. A location several miles from the nearest center of population or transportation facilities is especially condemned.

2. The surroundings should be free from objectionable features such as cemeteries, certain industrial occupations, etc.

3. Sufficient property should be purchased to permit of proper location of buildings, provide recreation space for patients and the establishment, if possible, of a farm colony for ex-patients. The committee advises against the purchase of farm property with the intention of using it to produce an income for the institution through garden truck, etc., by means of patient labor. The establishment of a farm and a dairy are not recommended. Small truck gardening and poultry establishments are permissible in connection with the industrial occupation department.

GENERAL CONSTRUCTION

1. It is recommended that infirmary, or bed patients be housed in two-story, fire-proof buildings, and that the administration building also be fire-proof. Ambulant patients may be housed in units of sixteen in one-story buildings or thirty-two in two-story buildings, the central or administration portion being fire-proof where the buildings are two stories in height. Canvas construction is not advised.

Twenty per cent of the total capacity of the institution should be especially arranged for the accommodation of acutely ill patients and 30 per cent for the care of other advanced cases not acutely ill, but still non-ambulant. Forty per cent of the capacity should be provided for ambulatory patients. Especially planned quarters for children acutely ill from tuberculosis and classified as open cases should be provided. Separate quarters for children should be arranged for closed cases, and for preventorium cases.

SPECIAL CONSTRUCTION

1. Each institution irrespective of size, should provide a room or rooms for the physical examination of patients, consultations, treatment of nose and throat, minor surgery, and other treatments, for laboratory use, and, where possible, for x-ray. The committee especially recommends a completely equipped department for the treatment of nose and throat conditions in all institutions. Every institution of 100 beds or more should be provided with a complete x-ray equipment.

2. Special planning is necessary for the proper housing of staff and employees. A separate building for each is best. If impossible to provide quarters in separate buildings, staff and employees should be housed in wings not containing patients, but never in basement rooms. Nurses should be provided with pleasant, comfortable quarters in which the hospital or institution atmosphere is eliminated, sufficiently removed from patients to permit of complete relaxation when off duty. A recreation or social room and facilities for outdoor amusements should be provided for both nurses and employees.

3. A recreation or social room should be provided for patients in all institutions. The committee is of the opinion that little has been done in the average sanatorium toward eliminating the institutional atmosphere so objectionable to patients whose residence is desirable for several months.

In small institutions, provisions for industrial occupation or occupational therapy may, in a limited degree, be included in the recreation quarters. In larger institutions special provision should be made for the proper housing of the department of industrial therapy, a department which has its place, and which should be established in every sanatorium.

4. In the opinion of the committee, staff dining rooms are neither required nor desirable in smaller institutions. In larger institutions, where numbers of patients are cared for, and where non-professional employees are present (such as stenographers, clerks, bookkeepers, wives and children of staff) it is wise to provide dining rooms separate from those used by patients. In all cases, servants should have and use a separate dining room.

5. A room should be provided for the care of the dead which can be reached by attendants with the least possible disturbance to patients, and from which bodies can be removed readily and inconspicuously.

MEDICAL AND NURSING SERVICE

1. The medical head of each sanatorium should be a specially trained expert in the institutional treatment and management of tuberculosis patients, and he should devote his entire time to the affairs of the institution. In

instances where small sanatoriums find difficulty in procuring expert medical services, the committee recommends the Minnesota plan of dividing the full time of a physician between two closely located sanatoriums. A resident physician should be provided for each fifty patients.

2. A graduate nurse experienced in sanatorium methods should be in charge of the nursing department. A nurse should be maintained for each ten patients in the institution. Non-graduate nurses may be employed under the supervision of a graduate nurse and the services of a night nurse should be available in every institution.

All institutions of moderate size should have a dietitian. In small institutions the head nurse may assume such duties.

3. It is desirable to procure the services of a steward in an institution of seventy-five patients and over. He should have charge of the purchase of food supplies and their storage, under the supervision of the superintendent. He should have active charge of the culinary department and of all employees engaged in it.

A housekeeper should be employed in an institution of seventy-five patients or over. In smaller institutions her duties can be performed by the head nurse.

TRAINING SCHOOL FOR NURSES

It is the duty of all large tuberculosis sanatoriums to maintain training schools for nurses, if possible, in cooperation with nearby general hospitals. Former patients whose physical conditions warrant, may be admitted as student nurses.

INDUSTRIAL SHOPS AND FARM COLONY

The committee desires to urge the establishment of industrial shops and farm colonies for the employment of ex-sanatorium patients, under proper supervision. The committee holds the view that one of the weakest links in the present campaign against tuberculosis is the management, or lack of management, of ex-patients immediately after they are discharged from the sanatorium.

The waste of public funds may, in a large degree, be reduced by the avoidance of relapse in ex-patients. This can be accomplished by giving them proper employment under strict and efficient supervision. The farm colony affords much of value towards solving the problem.

PATIENT LABOR

Large sanatoriums should develop a department of vocational training for the benefit of those advised to follow new occupations after discharge.

While under treatment for active tuberculosis, and before such a degree of improvement has been attained as to permit of occupation in the industrial shops or farm colony, the employment of patient labor as an economical consideration in the management of the sanatorium, is strongly opposed. Permission may be given patients to carry out any hospital duties, provided the medical officer is satisfied that it will have no deleterious effect. Occupational therapy under proper supervision, for its psychic effect, is approved.

The establishment of free tuberculosis clinics, and the maintenance of full-time visiting nurse service, by means of which cases of tuberculosis may be discovered and admitted to the institutions, and discharged patients or ex-patients may be kept under proper supervision, is urged as a public health measure second to none in importance in our campaign against tuberculosis. This service should be a direct part of the activities of the sanatorium or in close cooperation with it.

Robinson Bosworth, Chairman,
George T. Palmer,
E. R. Van der Slice.

FULHAM HOSPITAL FOR BABIES ONLY

Tiny Ones of London Slums Cared for in Bright, Cheerful Quarters—Building and Part of Furnishings Donated —Need of More Such Institutions Great

Sick babies of the London slums who heretofore have had very little done to alleviate their sufferings are coming, by degrees, into their heritage, says the *British Journal of Nursing*. A hospital devoted solely to their interests has been opened recently at Fulham. For the present, only those afflicted with summer diarrhoea are received, but later all classes of medical cases will be admitted.

Funds for the support of the hospital are derived partly from the Borough Council and the Ministry of Health, the remainder being raised by private solicitation. The building and part of the furnishings were donated. Twenty-four infants can be accommodated at one time.

The principal ward was originally the billiard room, an additional story built over it affording bright, comfortable quarters for the staff. The wards are charming both from the esthetic and the practical point of view. Light, air, and cheerfulness abound. The walls are tiled in white with green dado to within about four feet of the ceiling, while the frieze above is of warm cream enamel. The principal ward has French windows opening into the garden.

The cots are black, but the tiny bassinets which stand in the center of the wards are exceedingly dainty in their inexpensive white draperies. The little coverlets, of fine white butter muslin, are finished with a bow of ribbon at the junction of the curtains. The window curtains are of white, coarse-mesh net.

The useful little glass-topped lockers are of white enamel, as are also the headboards which hang on the ends of the cots. Bamboo screens draped with light blue checked gingham are attractive and uncommon adjuncts.

An infant's enamel bath is located in one corner of the ward, and basins provided with both hot and cold water are a great convenience for the nurses.

The babies are clothed in three simple knitted garments —vest, jacket, and overalls.

There is as yet no resident medical officer, but the tiny patients are given medical attention daily, or oftener if necessary.

Many more of these hospitals are sadly needed in the poorer districts, and it is believed that the movement which has been inaugurated at Fulham will progress until thousands of tiny sufferers will be benefited.

Where a Color Line Is Not Drawn

One of our brand-new babies was fading away into a tiny white shadow because his little mother did not have enough milk to give him, says *The Bulletin of the New York Nursery and Child's Hospital*, and all the special formulae and even expressed breast milk failed to make him gain. It just didn't appeal to him, that was all, and he refused to take it. Then someone thought of one of our colored mothers who had more than enough for her own curly-headed little girl.

"Sure Ah'd be more dan glad to nuss dat baby," she said, when the little mother offered to pay her anything she asked if she would act as foster mother to her child; "but please doan say nothin' to me about pay. Ah'd be jest too happy to do anything to help that poor li'l' white lamb." And so little Tommy has been gaining one or two ounces every day, and gradually each day a little more color and life is creeping back into his little white, pinched face.

CONSULTANT CRITICIZES PLAN OF WALLUM LAKE SANATORIUM

Questions Soundness of Doctor Barnes' Theory of Economy—Thinks Low Unit Cost Was Secured at Expense of More Desirable Features

In relation to Wallum Lake Tuberculosis Hospital for advanced cases, we believe the text accompanying the plans describes many admirable innnovations and arrangements, but we consider it our duty to call the attention of builders to a number of things which we think they should weigh most carefully before adopting them for sanatoriums they may be designing.

It would seem to one who has been confined to a bed by illness for only a few days in his life that it is much more restful and satisfying to be close to the ground, to see the nearby flowers, shrubbery, and lawn, and to feel that one could go to them without a great effort than it is to be several stories above ground, with only a distant view of the common objects for which one longs when confined by illness.

It would seem that a state institution should not be cramped for ground space and that the state or municipality should not be compelled to build a high building. The lower cost of one-story buildings just about offsets the cost of connecting corridors; but the cost of operation (heating, up-keep, and the like) of one-story buildings and connecting corridors is probably greater than that of a single multi-story building.

The large wards, which are similar to the early case or shack type wards, would not meet the approval of a majority of the directors of sanatoriums, for the treatment of advanced cases. Notwithstanding the fact that the windows can be opened in the two-bed wards, they are very likely to be closed in stormy weather, with the result that two patients will be confined in a room having approximately only six hundred cubic feet, which is but about one-half the contents required by many municipal and state regulations for one patient.

It is very questionable if three single bed rooms out of a total of 153 beds are sufficient for this kind of a hospital.

The accommodations for employees are excellent and make good use of valuable space which must be created for the support and proper elevation of the upper stories, and which could not well be used for patients. The employees' quarters seem commodious when compared with the twenty-five-patient, locker, and toilet rooms.

The dining room is, presumably, the only recreation room. The reasons for the omission of a recreation room would be interesting.

The locker room and lavatory are too small for eighteen patients unless all cases are bed-ridden, in which case it would be better to have the lavatory adjoin the wards and the locker room beyond. If a locker room is not used as a dressing room, there is no object in having the unobstructed floor space. It could be three or four feet narrower.

The statement that the cost per bed was $735 is based on an erroneous assumption. Doctor Barnes assumes that, inasmuch as three floors are occupied by patients, and one is used for help, waiting, blanket, truck, x-ray, operating, and clock rooms, also doctors' offices, autopsy, morgue and laboratory, three-fourths of the cost can be charged to patients' beds and one-fourth to other services. This does not seem a fair accounting, for all of the rooms named are a part of any hospital, and the portion of the basement occupied by these rooms should not be deducted. Neither should all of the portion occupied by help be omitted. It would be impossible to build the three upper stories without sub-grade walls, and, as it would not be desirable to place the lower patients' floor on the ground level, only a comparatively small part of the cost should be deducted on this account. A more equitable basis of arriving at a unit cost would be to assume that it costs as much to create the space and accommodations for an employee's bed as it does to create a patient's bed, and to count all of the beds, including those for help as well as those for employees.

Unit costs are generally based on cost of building without furnishing. By deducting the furnishing items in Dr. Barnes' statement, we arrive at $135,928.21 as the cost of the building proper. We also find from the plans that the cubic contents of the building are 298,500 cubic feet. This makes the unit cost 45.5 cents per cubic foot, which is not exceptionally low at the prices of labor and material today.

Taking the same cost and dividing it by 173 beds, gives $786.71 as the cost per bed; but this seemingly low cost is obviously explained by the small cubic contents of the whole building, per bed, namely, 1,725 cubic feet, which is one-half of the unit contents generally accepted. It is also obvious that, if the building contained double its cubic contents and the same number of beds, the cost per bed would be almost double.

The low cost has been obtained at the expense of extreme limitation of space and accommodations per patient.

DOCTOR BARNES REPLIES TO CONSULTANT'S CRITICISMS

Defends Original Plan On All Points to Which Objection Is Made—Adds Own Criticism on Features Which He Thinks Might Be Improved

In estimating the value of the above criticisms of Wallum Lake Sanatorium, it is proper to consider the following:

Ventilation of Rooms—Laws establishing standards of cubic feet per patient have value if applied to schools, churches, general hospitals, or any buildings to be used with closed windows; but they need great modification if applied to buildings of the porch or shack type or to those operated with plenty of open windows, as are sanatoriums or hospitals for consumptives. It is the floor space and not the cubic capacity of a porch that needs to be figured. It is obvious to anyone that better air can be obtained in a small room with the windows open than in a room several times larger with the windows closed. Concerning the ventilation of the two-bed rooms, it may be of interest to note that there has not yet been a storm this spring or summer requiring the closure of both windows in any room. We have no record of last winter, but the head nurse on the ward estimates that it was necessary to close both windows in the rooms four times last winter and the orderly estimates six times. If we accept the maximum, add two for possible closures this fall and assume that they must be closed twelve hours at each storm (which is greatly in excess of the fact), these room windows can be opened 362 days out of 365, or over 99 per cent of the time. It is almost never necessary to close the window at the foot of the bed if the awning is put down.

Recreation Room—The dining room is available six hours daily for reading, games, phonograph and piano music and moving pictures. It is neither luxurious nor stylish to use a dining room as a recreation room, but

this dining room furnishes all essentials for bedridden cases.

Size of Locker Rooms—The size of the east ward locker and bathrooms is just right, as shown by experience; but the west ward bathroom, although of greater area, should have been two or three feet wider than it is because the narrower width does not permit as advantageous placing of equipment. These locker rooms were designed for bed cases and would not be large enough for dressing rooms for wards in which the majority of the patients were ambulant.

Location of Bathrooms—Were the bathrooms rather than the locker rooms next to the ward, some steps would be saved, as the bathroom is used more; but it is doubtful whether this change would be better because the steam, odor, etc., which are often present in a bathroom make it unpleasant for the eighteen ward patients to pass through that room to get to their lockers; also there is less risk of freezing the plumbing in zero weather if the locker room is next the open ward. About 20 per cent of the room patients, though feeble, prefer to go to the bathroom which is nearer for them as at present located.

Wards or Rooms?—Our experience shows that 25 to 30 per cent of chronic febrile and incurable cases are unable to go to the bathrooms and should therefore be in rooms even though the patients themselves, as is usually the case, prefer to remain on the wards. Of the 30 per cent of cases in rooms, how many should be in single rooms and how many in rooms having two beds? My own belief is that two or three is the right number of single rooms for this floor.

If many cases of bone or joint tuberculosis should be admitted, or if patients with lung abscess, pyothorax, gangrene and bronchietasis are treated, the proportion of single rooms should be increased as these cases are usually offensive. If the patients are people of education and refinement who appreciate and enjoy privacy, the number of single rooms should be proportionately increased. One patient may and often does annoy another by coughing, moaning, vomiting, bad odor, moribund conditions, diarrhoea, and mental peculiarity, and the patient asks for a different room-mate. It is true the patients wish agreeable companions, but, after having good and bad companions for months, over 90 per cent of them would rather take pot-luck and have some companion than none at all. Of course, if these patients were obliged to have offensive room-mates for months at a time (which is never the case), they might prefer single rooms. As one of the chief aims of a hospital for incurable consumptives should be to keep the patients contented, it is well to consider in detail what the patients think in regard to wards and rooms. I personally interviewed the seventy-nine patients of Wards One and Two. Of 52 patients on the 18-bed wards, 49 (or 94 per cent) preferred the 18-bed ward to single rooms. Of 27 patients in the rooms, 25 (or 92 per cent) preferred a double bedroom to a single bedroom. Of the 79 patients, 74 (or 93 per cent) objected to being put into single bedrooms.

Why are the vast majority of consumptives of the working classes unhappy in single rooms? The reasons for preferring open wards to rooms and double rooms to single rooms given the writer by the seventy-four patients above referred to may be summarized as follows: The ward seems brighter, livelier, it has music, more people are coming and going, the other patients are good company and pleasant to talk with, there is fun, and the "time passes quickly." The objections to the single rooms are that they cause patients "to think too much," "to brood," to "worry," to be "nervous," and the patients are "too lonesome." One patient who had been alone in a room in another hospital for several weeks told me that it was like solitary confinement in a prison.

Multi-Storied Buildings.—The objections against multi-storied or high buildings on state or municipal grounds would be well taken if applied to sky scrapers, but as a person standing on the top ward floor of this hospital has his eyes only thirty-three feet above the ground, it seems hardly correct to speak of a "distant view of common objects" such as flowers, shrubbery, etc.

One-Story Buildings—It is not admitted that a one-story building is cheaper per hospital bed than a two-story building, if the two buildings are equally well constructed. When our children's ward was built here in 1915, we cut the expense almost in half, as shown by actual bids, by redrawing the plans so that two wards on one story were put the above each other in a two-story building. Of course, the materials have to be somewhat stronger, and the labor of placing materials in position slightly more in a multi-storied building, but this does not begin to counter-balance the great extravagance of providing a roof, cellar, and foundation for one story instead of for two, three or four.

Cost Per Bed—In computing the cost of the patients' quarters, I deducted one-fourth of the cost, as one-fourth of the building is devoted to employees and administration. An objection made against deducting this one-fourth of the building expense for the basement floor is that the doctor's and the dentist's offices, the autopsy, morgue, laboratory, waiting, blanket, trunk, x-ray, and operating rooms are a part of any hospital. It is true that all these rooms are part of any hospital, but it is not true that it is necessary to build these rooms every time an institution erects a new ward building. If you start to build an entirely new institution you expect to do this, but if they were built every time new hospital wards were added to an old plant, it would be senseless duplication. Is it not then obviously unfair to charge up these rooms in computing the cost of patients' quarters?

It is suggested that employees' beds be added to the patients' beds in order to find the unit cost per bed. From the space used for the laboratory, x-ray, and other rooms, fifteen additional employees' rooms could have been obtained, or a total of thirty-three employees' beds, which added to the 153 patients' beds, gives a total of 186 beds. Using the figure of the one who reviewed my article $136,928.21 as the cost of the building proper, the unit cost per bed would be $730. Using the figure $132,970.69, which I consider the cost of the building proper, the unit cost per bed was $714.

Objection is also made that "it would be impossible to build these upper stories without sub-grade walls." True; but it would be equally impossible to build the employees' basement floor without a roof, which is charged to the patients' quarters. I did not claim that patients' quarters and employees' quarters could be built separately for this sum but letting the walls of the employees' quarters support the wards and the wards furnish a roof for the employees' quarters, we got them both for the sum stated, the patients' quarters costing only about three-fourths of the total.

Small Cubic Capacity Per Bed—The reviewer of my article rightly concludes that the low cost of this building per bed is explained by the small cubic contents of the whole building per bed, which is only one-half of the

capacity generally accepted. The cubic contents of a whole hospital building is often made up of many spaces which do not add either to the well-being of the patient or to the convenience of the work, such as little-used cellars or basements, attic spaces, connecting corridors, long tunnels, unnecessary height between floors, etc. If these waste spaces are ruthlessly cut out or utilized, and if someone has the time and zeal to put endless labor into figuring the floor space needed for each article of equipment to go into each service or unit and the amount of space which is sufficient—but not a bit more than sufficient—to do the work conveniently (someone must do this who knows more about the work to be performed than the architect), he will, if he survives, see an enormous cutting down of the cubic capacity of the hospital as a whole from the usual plans submitted.

The Author's Criticisms

Were I again given this same hospital building problem, I would make the following changes:

1. Add two feet to the length of the rear extension so that the west bathroom and the examination room would be two feet wider.
2. Obtain money for the above change by shortening the tunnel one-fourth ($1,250 saved) which would still leave 150 feet intervening between the new hospital and the old service building.
3. Have three single rooms instead of one in each 51-bed ward by converting one double-bed room into two single rooms. The extra space required to convert two rooms into one could be obtained by narrowing the width of the rear extension corridor to six feet six inches, which would still be sufficient.
4. Change the location of the single rooms to the north end of the rear extension, so that the odor from an offensive patient would be far removed from the diet kitchen.
5. Increase the width of the stair treads nearly two inches by having the risers come up plumb instead of tapering three-fourths of an inch, and by having the treads overhang one and one-fourth inches.
6. Locate the laboratory in the east end of the east wing of the basement to avoid the grove which cannot be sacrified but which shades the present laboratory location.
7. Have one long plate glass window in the operating room instead of three as at present.

The seven changes above outlined would not increase the total expense of the building. This hospital building proper cost $132,970. If it has only half as much cubic space as it should have, then the money was unwisely spent, but, if, as the author believes, it adequately fulfills its functions, $132,970 was saved to the state.

In working out these plans, I was often asked why so much trouble was taken to go over all the rooms to measure and remeasure and get the exact space needed to do the work. I was told to add on two or three feet everywhere to be sure to get enough for it was suggested that, even if it did cost more, the state was rich and should pay. I replied that there is a happy medium between misery and extravagance which is comfort. A private hospital for the rich should provide every luxury they wish which is not harmful and for which they are willing to pay, but a hospital supported by the public should have every comfort and convenience necessary for the best and most efficient care and treatment minus unnecessary luxuries of space, equipment, and service. Such luxuries can be provided only by limiting the number of beds or the amount of work done, which, in turn, would leave in misery other people in the state who need the care. The public will spend only about so much money, and to leave part in misery in order to give others luxuries is not a sound policy.

MISSISSIPPI VALLEY CONFERENCE ON TUBERCULOSIS HOLDS SEVENTH ANNUAL CONVENTION

Important Topics in Tuberculosis Campaign and Lessons From the War Presented—Officers Elected For Coming Year

The seventh annual session of the Mississippi Valley Conference on Tuberculosis was held in Des Moines, Iowa, Sept. 22, 23 and 24, 1919. It was one of the best sectional conferences ever held, with a total of 500 registrants.

An address of welcome was given by Governor Harding, of Iowa, who briefly reviewed the tuberculosis campaign in his state, with the results to date.

Much interest was aroused by Julia Lathrop, chief of the Federal Children's Bureau, Washington, D. C., by her discussion of the subject, "Tuberculosis, An Evidence of the Need for Child Welfare Standards," and also by Owen R. Lovejoy, president of the National Conference on Social Work, New York City, by his paper on "Prevention."

Two subjects which were given special and detailed prominence throughout the session were "Occupational Therapy in the Treatment of Tuberculosis Patients," and "The Eradication of Tuberculosis Through Our Efforts With the Child, Plus the All-Important Education of the Public," presented, respectively, by Mr. Kidner, of the National Tuberculosis Association, and Miss Beatrice E. Lindberg, who represented the Advisory Commission of Minnesota.

Various "lessons from the war" were presented by different speakers, among whom were Dr. George T. Palmer, of Illinois; Major W. H. Watterson, M.D., Federal Board of Vocational Education, Washington, D. C.; Mr. Kidner, of New York; and Dr. Walter J. Marcley, of Minneapolis, Minn.

Another topic which was brought into prominence before the conference of the Mississippi Valley Sanatorium Association was that of nursing problems, suggested by a paper of that title by Dr. R. L. Williams, of the Wisconsin State Sanatorium, who advocated correspondence courses for the training of tuberculosis nurses in the smaller sanatoriums not capable of maintaining training schools. His idea was well received. "The Standardization of Sanatoriums," a report of the committee appointed at the 1918 conference, consisting of Dr. George T. Palmer, of Illinois; Dr. E. R. Vander Slice, of Michigan; and Dr. Robinson Bosworth, Chairman, St. Paul, Minn., is published on page 422 of this issue of The Modern Hospital.

The officers of the Conference were: President, Sherman C. Kingsley, Cleveland; vice-president, W. J. Pettit, M.D., Ottawa, Ill.; and secretary-treasurer, Ralph J. Reed, Des Moines, Iowa.

The 1919 officers for the Mississippi Valley Sanatorium

Association were: President, Dr. H. V. Scarborough, superintendent of the State Sanatorium, Oakdale, Iowa; secretary-treasurer, Dr. E. B. Pierce, superintendent of the Michigan State Sanatorium, Howell, Mich.

The 1920 officers of the Mississippi Valley Conference on Tuberculosis are: President, Dr. John H. Peck, Des Moines, Iowa; vice-president, Dr. Walter McNab Miller, St. Louis, Mo.; and secretary-treasurer, Dr. A. T. Laird, superintendent of the Nopeming Sanatorium, Duluth, Minn.

The 1920 officers of the Mississippi Valley Sanatorium Association are: President, Dr. Robinson Bosworth, St. Paul, Minn.; vice-president, Dr. G. L. Bellis, Muirdale Sanatorium, Milwaukee, Wis.; and secretary-treasurer, Dr. E. B. Pierce, State Sanatorium, Howell, Mich.

The 1920 conference will be held in Duluth, Minn.

First Aid in the West

There is a western legend of an Arizona bridegroom whose bride of a few months was missing. When asked where she was, he explained with tears in his eyes that the poor woman had been thrown from her horse and he had been compelled to shoot her because her leg was broken, although "she was a fine girl and he loved her considerable."

Fortunately it does not take such drastic incidents as this to demonstrate the need of first-aid instruction, and this phase of Red Cross work is daily being brought to the attention of the people in this country with compelling force, demonstrating the absolute necessity of first-aid knowledge in the every day conduct of life.

Accidents are unforeseen. The person versed in first-aid is a tower of strength at such moments, and his prompt action is frequently the means of saving life outright. The courses of instruction in first-aid hygiene, and home care of the sick, offered to the high schools by the American Red Cross, mean an opportunity for those upon whom the burdens of home nursing usually falls, to learn how to handle such cases with the least effort and maximum result.

This instruction is not in the form of haphazard lectures, but is carefully planned and as systematically taught as any other part of the curriculum. It forms an unique and opportune supplement to the high-school courses in physiology and anatomy and taken with these subjects will be all the more vivid to the young students.

Accidents will happen in industry and at home. Few of us escape, whether by actual experience or indirect association. Instruction is the sanest method of meeting such emergencies and the general needs of the injured should be part of the common education of each individual.

Employment for Consumptives

In southern districts, as in Sussex, for example, light work in the woodlands—the utilization of undergrowth for fagots, hurdles, hop-poles and so on—has long been a staple industry. Fitter employment for consumptives with quiescent disease could hardly be got. Plate-laying on rural railway lines is another eminently favorable occupation. Consultation with labor authorities and with local employers should help in getting many of these poor men put in the way of a new start in life, useful not only to themselves but also to the national economy. For market gardening and allotment work, sure to figure in the shortest list of possible employments, will relieve the provision and transportation of food, which constitute now so great a burden upon our resources.—*The Hospital.*

OCCUPATIONAL THERAPY, VOCATIONAL RE-EDUCATION AND INDUSTRIAL REHABILITATION

Conducted by DOUGLAS C. McMURTRIE, *Director Red Cross Institute for Crippled and Disabled Men* and MRS. CARL HENRY DAVIS, *Adviser in Occupational Therapy, Milwaukee-Downer College.*

REHABILITATION OF THE ARMLESS

Afflicted Ones Not Only Learn to Use Appliances Furnished But Invent New Substitutes for Hands—Many Achieve Economic Independence

To fit a man who has lost an arm to earn a decent living is no easy task for the re-educator. As to the man who has lost both arms—these questions arise: Is it possible to do anything at all for him? Can he ever hope to become independent? Men with rare will power and ingenuity have, we know, risen above even such crushing afflictions, but what prospects are there for the average man? From France, where the soldier who has lost both arms is not an exceptional problem, comes an answer which is most encouraging. Dr. P. Chatin, who all during the war was one of the head physicians in the center for the provision of artificial limbs and re-education at Lyons (*Centre d'appareillage et de rééducation*), has recently published a booklet in which he recounts his experiences with twenty-five armless men sent to the center for appliances and training.[1] How their rehabilitation was achieved must interest all workers in the field.

"With time," Dr. Chatin tells us, "in which they can grow accustomed to their disability, with physiological compensations, with a little ingenuity, and much perseverance and determination, the *double-manchots* arrive at results which astonish us and themselves. When we tell an armless man who has just arrived at the hospital that that very evening he will feed himself and write to his family, he exhibits a wonder which becomes incredulity when we go on to say that his comrades who are similarly afflicted are writing on the typewriter and riding a bicycle. After a few days, however, he is doing everything just as others are and trying to work out combinations or devices for remedying his disability."

Many of the appliances used by the pupils as a substitute for hands are their own invention. Those given out at the center—by the government and the aid society cooperating—to every case of a double forearm amputation, include two Gillet work arms of aluminum, which have been found useful in agricultural work; two wooden hands with movable thumbs; a wrist-band of leather with loops of rubberized cloth; several tool-holders for agricultural work; and various accessory devices, such as a writing tablet with a device for holding the paper, a special table knife with a curved blade, a sponge, a razor, and a shaving-brush holder, snap buttons, and special hooks and eyes for clothes and shoes. Excellent illustra-

[1] Dr. P. Chatin in Etude sur la rééducation fonctionnelle et professionnelle des double-manchots. Lyon, 1918.

tions of these and of what men can do with their aid are collected at the back of the booklet.

A section on functional re-education—fitting the armless man to perform the acts of daily life—describes how he is taught to utilize his bare stump, simple wristbands of leather or rubber, or more complicated appliances with which to wash and dress himself, shave, eat, smoke, write, use a typewriter, and ride a bicycle. The section on vocational re-education relates the after-history of a number of pupils who have achieved economic independence. One has for more than a year been a successful teacher—his former profession; several are doing clerical work; one has gone back to his rope walk and is operating it with the aid of his family; one peddles vegetables; one wanted to be a lock-keeper but was refused the position, so he married and obtained the appointment for his wife. He turns the lever of the gates by means of the Julien agriculturists' arm, and intends to raise a little garden. Several former farm workers have been enabled to use the fork, spade, scythe, and other tools, but they cannot do a sufficient day's work to earn their living in that way. No armless man, says the author, should be directed to an occupation which will separate him from his family.

RE-EDUCATION IN BOMBAY TECHNICAL SCHOOL

Disabled Indian Soldiers Profit by Instruction in a Variety of Trades and Professions—Men Paid for Work Produced

The great usefulness and success of Queen Mary's Technical school for disabled Indian soldiers at Bombay are clearly evidenced in the first annual report of the school. Opened in May, 1917, the school drew its pupils during the first six months of its existence mainly from the Marine Lines Hospital, which supplies artificial limbs to the whole of the Indian army. Later, however, as the school began to be better known in the provinces, it received applications from native villages and from hospitals and regimental depots all over India. During the first year 223 men were admitted, the greater part toward the end of the year; at the time of the report, applications were being received at the rate of about twenty a month. Fifty-nine of the men have already passed the necessary examinations and have been granted school diplomas. Of these, twenty-nine secured employment through the school, the others preferring to go to their homes, where they were certain that they would easily find work.

The tastes of these bearded mystical soldiers in regard to a future occupation are curiously like those of the automobile-minded youths of the western armies. Most of them want to learn motor mechanics or, as a second choice, the operation of oil engines. Farming is unpopular; in fact, that department has had to be abolished. The hosiery department, where cotton, silk, and woolen socks and stockings are knitted by machine, contains a fair number of pupils; three trained men have purchased machines and are doing work on their own account at their homes. The engineering, or machine shopwork interests the men, but is not so popular as some other trades on account of the length of the course, which is from eighteen months to two years. Tailoring suffers for the same reason. Why only three men have been admitted to the cinema class, which in other places is usually one of the most crowded, is not clear.

Productive work is done in practically all of the shops, and the men are paid for the work they turn out.

For married men special quarters have been built where they can live with their families.

MACHINE-KNITTING FOR THE CRIPPLED BLIND

Machine-Knitting of Large Articles Found Profitable—Work Attracts Cripples as Well as Blind

One department of the hospital-school of the Permanent Blind Relief War Fund at Neuilly-sur-Seine is reported to be particularly successful. This is for teaching machine-knitting, not of socks and stockings, which have been found unprofitable, but of sweaters, jackets, children's and women's suits, and other large knitted articles. The department has a plant of thirty machines, which are now made in Switzerland and which cost, with accessories, about 1,500 francs each. It attracts pupils to its full capacity, as the work can be done by men with other disabilities besides their blindness—men with stiffened joints, arm amputations, and even double arm amputations. For operating the thirty machines, four women mechanic-teachers are employed; their task is to look after the machines, replenish yarn supplies, take work off and put it on the machines, occasionally help out a pupil in difficulty, and exercise general oversight of the work. Fifteen men have graduated from the knitting school after an apprenticeship of about three months and are reported to be earning a good living at the work in their homes.

The need of work within the powers of men who are both blind and otherwise disabled is strikingly shown by figures given out at the Neuilly school. Reports show that of 3,274 French soldiers blinded as the result of war injuries, one hundred have lost one arm, thirty-five have lost both arms, and of these a few have lost a leg.

FITTING OF PROSTHETIC APPARATUS IMPORTANT

American Type of Wooden Limb Generally Approved—Each Occupation Requires Special Design

As a clear and authoritative exposition of the anatomical, physiological, and practical conditions which an artificial arm or leg should fulfill, "Artificial Limbs," by Doctors Broca[1] and Ducroquet, translated and edited by R. C. Elmslie, will be valuable to the orthopedic specialist and others interested in this subject. Different materials and types of limbs are described. The American type of wooden limb is meeting with general approval, as it is light, strong, and silent. As the fitting of the prosthetic apparatus is of equal importance with the limb itself, the authors devote a large part of their attention to this factor, giving in detail methods of fitting and suspension for the various kinds of amputations. Care for the fitting should indeed begin with the amputation, owing to the advantage of the lateral over the terminal scar for purposes of prosthesis. Special notice is also bestowed on the use for which the limbs are designed, whether for workday or "Sunday" use, or for particular occupations. The "plumber's hand," for instance, consists of a pair of gas pliers, and ends in edges for cutting wires. A workman using an artificial "hand" would probably have another model more nearly resembling the real member to be screwed on for use in social life. The type of leg desirable for a man of sedentary occupation differs considerably from the one which should be used by a manual or agricultural laborer. For these reasons the authors emphasize the need of a man's determining what trade or profession he is to pursue before ordering his artificial limb. The last chapter of the book is given up to a brief

1. Broca, August and Ducroquet, authors of "Artificial Limbs," which was translated and edited by R. C. Elmslie, London, 1918.

but valuable discussion of general principles in the re-education of the disabled, emphasizing the necessity of such re-education being begun in each case as soon as possible, and the danger to the patient of sentimental pity in place of constructive help. Many line drawings and photographs illustrate the text clearly, if not handsomely.

SERBIA'S CARE FOR HER DISABLED SOLDIERS

Trades Which Will Be Useful in Homeland Being Taught —French Farmers in Role of Instructors

An interesting account of what Serbia has done for her disabled soldiers was contributed to the *Revue Interalliée pour l'Étude des Questions intéressant les Mutilés de la Guerre* of last January by Professor Agathonovitch, a member of the Serbian chamber and of the permanent Inter-Allied committee on the disabled.[1] He states that the first measure of relief for disabled soldiers in Serbia was a law granting tiny pensions to men wounded in the Turkish wars of 1876-1877. This was revised in 1886, after the Bulgarian war and again in 1914 after the two Balkan wars, which left in their train nearly 40,000 disabled men. The world war has made of Serbia a nation of disabled men, and the government realizes that one of its most important tasks is to care for their future. It is therefore preparing, in accordance with modern ideas, to provide the vocational training which will fit them to return to work.

As ninety per cent of the population live by agriculture, the Minister of Agriculture has been placed in charge of re-education. Serbian *mutilés* in France, by an arrangement between the governments, enjoy the same rights as French soldiers in the matter of functional and vocational re-education. The majority are placed for instruction with French farmers. Care is taken that those learning trades, learn the ones needed in Serbia and learn them thoroughly, for there is no division of labor there. For small merchants and traveling salesmen, the government has organized a practical commercial course at Aix-en-Provence, and for men who might hold small government positions a course in administration at Francheville. For vocational re-education in Serbia delivered, the government has ambitious plans. Schools will be organized—the teachers are already being selected and trained—women will be trained to make up for the lack of men, and the manufacture of artificial limbs, and the use of agricultural machinery will be taught.

One in Fifteen Hundred an Epileptic

One is liable to forget that about one in every fifteen hundred persons in this country is an epileptic, and that the proportion is highest at the common recruiting age. The epileptic was particularly unfit to withstand the nervous stress of war. Yet an enormous number of mistakes have been made concerning this condition, even more regrettable for the unnecessary expense they have brought on the country. *Petit mal* was extremely likely to be overlooked, but by no means free from danger. Severe fits frequently developed. The patient was liable to mental aberration and to weakmindedness. Loss of consciousness may be but momentary or even incomplete, and the lesson for civil practice that our war experience teaches is that we should be more on the outlook for epilepsy and more careful in our occupational disposal of these cases.—*The Hospital.*

1. Agathonovitch. Ce oue fait la Serbie pour ses invalides de guerre. *Revue Interalliée pour l'Etude des Questions intéressant les Mutilés de la Guerre*, Paris, 1919, ii, 1-16.

DEPARTMENT OF NURSING

Conducted by CAROLYN E. GRAY, R.N., *Secretary, New York State Board of Nurse Examiners.*

Please address items of news and inquiries regarding Department of Nursing to CAROLYN E. GRAY, R.N., Secretary of the New York Board of Nurse Examiners, 135 E. 45th St., New York City.

READJUSTMENTS WHICH TRAINING SCHOOLS AND NURSING DEPARTMENTS ARE FACING*

Shortage of Both Graduate and Student Nurses a Serious Problem—Solution Lies in New Conception of Nurse by Community—How Cincinnati Has Reacted to the Situation

By LAURA R. LOGAN, A.B., R.N., Professor of Nursing and Health, and Director of the School of Nursing and Health, University of Cincinnati

Whether from the standpoint of the university or that of any other hospital, the readjustments which training schools and nursing departments are facing are pretty much the same. There are two problems which, together, we must solve. For one thing, we must effect such adjustments as are necessary to overcome the present shortage of graduate nurses proficient in teaching, in public health service, and in institutional management. This is a serious and an immediate problem from the point of view of boards of health, public schools, and, indeed, of all institutions and agencies concerned with the prevention of disease, health education, or nursing care. Dr. C. C. Pierce, Assistant Surgeon General of the United States Public Health Service, in a paper on "The Nurse as a Factor in Venereal Disease Control," read before the National League of Nursing Education last June, called attention to the fact that 50,000 nurses would be needed to fill the demands of bills then before Congress and state legislatures as compared with only 6,000 in such service before the war. This, he said, was a challenge to those responsible for the education of the nurse, which indeed, it is—a challenge and an obligation.

Together we must also effect such changes as will enable us to attract to our schools of nursing well-prepared students in more adequate numbers. The shortage of pupil nurses is a serious and an immediate problem from the point of view of hospital administration and proper training school conduct. For we know, all too well, that upon a sufficient number of student nurses depends the nice adjustment of adequate care for patients, and adequate teaching for the pupil nurse herself.

I have said that we face a common need for readjustments which differ in some phases, to be sure, but which are pretty clearly defined and recognized by us all. It is the solution which has troubled us. And it is the solution, not merely a reiteration of the adjustments, that I would discuss.

To solve any problem one must, of course, seek an

*Read at the Twenty-first Annual Convention of the American Hospital Association, Cincinnati, September 8-12, 1919.

understanding of the causes of the difficulty and then apply the remedy. The discrepancy in the public health nursing ranks is an inevitable result of the general omission of any such training from the usual under-graduate preparation. This we must remedy. It is the general consensus of competent nursing and medical opinion that the shortage of student nurse applicants is the direct result of better opportunities offered young women today in so many other lines of endeavor. It seems clear that we must effect changes that will enable us to compete more successfully, if we are to survive, with other educational, social, and industrial institutions which now so universally offer better working and educational advantages.

Just as young women are leaving the teaching profession because of insufficient pay and monotonous round of set duty, so they are not entering training schools because of long hours and failure to find therein varied and thorough training in all the present-day branches of nursing itself. Thus we have come to recognize the necessity for an eight-hour day. We are asking how we can make the three years of apprenticeship work more profitable and attractive to the student, and how we can improve our teaching methods and equipment; for such students as apply are seeking those schools where there is the most advantageous balance of practical and theoretical teaching and those which include the essentials of training in public health nursing in the under-graduate course. The large mass of data offered by the United States Student Nurse Reserve Campaign of the Council of National Defense during the war taught us conclusively, if proof were needed, that the greatest shortage of applicants showed itself where the training schools for nurses and the hospital facilities for training were weakest; whereas, in many instances, the better equipped hospitals and schools had waiting lists. We are ready to make such necessary changes as seem for the better, but how can we possibly make them with our present budgets?

The whole gamut of problems and readjustments, budgets included, in my judgment, resolves itself into an educational problem which concerns on the one hand the status of the training schools for nurses as educational institutions, and, on the other, the education of the community to a recognition of its responsibility therein. The only solution lies in the bringing into existence of as sound and universal an educational system and basis for the training of the nurse for professional usefulness as the community has long since provided for other groups of public servants—librarians, teachers, engineers, chemists, physicians, or lawyers.

I wish, then, to outline how we may hope to bring this sounder educational basis for nursing education into existence, and to indicate what constitutes our part therein as hospital superintendents and training school directors. I have thought, also, that perhaps the most useful and encouraging thing I might do would be to conclude with a description of the School of Nursing and Health of the University of Cincinnati, which operates in the Cincinnati General Hospital. This school has been an integral part of the university for three years, and to those of us most closely concerned with its inception and operation it seems to be solving, in a very practical and satisfactory way, not a few of the most pressing problems now before us for adjustment. What we have done others may easily hope to accomplish.

The burden of such adjustments as we are facing must be borne by the community as a whole. It is certain we cannot bear it alone, and the largest single step that we can take at present is for each one of us in his or her own hospital school and city to arouse a sense of community responsibility toward nursing education. It is advisable, too, that we keep conversant with the deliberations of the Committee on Education of the National League of Nursing Education in order that we may have the benefit of its guidance in educational policies.

Society has always been ready to assume its obligation toward any group when it sees that such a group may render an important service; more especially is this true when a constructive policy is at hand which can be safely counted upon to afford an adequate preparation of that group for its maximum service.

The unending calls for visiting, school, industrial, and institutional nurses that pour into our training school offices so much faster than we can turn out students to answer the calls, is forceful evidence that the attitude of the community has long since passed that milestone in its conception of the service of the nurse which marked the early days of the training school, when her ministrations to the sick in the hospital or as a private duty nurse to the well-to-do marked the limit of her servicableness. The community now expects the nurse to teach social and personal hygiene, and to work with the physician to prevent disease as well as to care for the diseased. Statistics and human documents alike point to the multiplicity of her services. One finds almost at random such summaries as the following:

"The Metropolitan Life Insurance Company found the mortality among its policy holders reduced by 12.8 per cent during the five years succeeding the employment of a visiting nurse service.

"New York City over a period of ten years, reduced its infant mortality from 186 to only 86 out of each one thousand babies—a reduction very largely attributed to the nursing service of the city."

Again it is reported in a recent study of pre-natal and obstetrical work in Boston that: "Out of 731 cases where proper medical and nursing care and inspection, before birth, was made available, the death rate among the babies during the first year of life was cut one half; during the second year of life it was cut one-third; still births were fifty per cent less than normal, and the mortality of mothers was reduced by 50 per cent."

As it stands today, then, the problem of the community's responsibility in the preparation of the nurse is not the failure to realize the value of her service, but rather a grave misapprehension regarding her preparation therefor. As a community, we have freely provided for all sorts of academic and professional education, but we have neither freely nor adequately provided facilities for nursing education. Most people know that the nurse is trained in a hospital; they believe that the hospital is entirely able to assume full responsibility for her education, but know very little about the content of her training.

We would, I believe, do well to acquaint the public generally with the fact that the system of nursing education universally in vogue is the apprenticeship method; that the student nurse enters the hospitals of our country with no universally standardized educational prerequisites for entrance, thus differing from all other school systems; that she is provided with uniforms, laundry and maintenance, and with a varying, but really unsafe, minimum of theoretical instruction, in return for which she carries the great burden of the nursing care of the patient in the hospital and sometimes adds to its maintenance through charges made to patients for her services. The public should be appraised of the fact that the service

she renders is so essential that were she, the pupil nurse, to go out of existence there would be only one solution—to employ an equal number of graduate nurses and hospital helpers to take her place. For three years the student nurse thus gives her service and receives what training and education she may.

It is a preparation too variable, too ill-assorted, and too precarious. We should make it clear that such an apprenticeship is not at all meeting the present demand which the community has for the graduate nurse, and that the trouble rests largely upon the failure of the community to meet its responsibility throught endowment or appropriation of public funds for the training school and failure to make the fullest use of its present educational facilities to meet the needs of nursing education. The Bulletin for the United States Bureau of Education for 1912 points out how haphazard and unsuitable a ground is offered by most hospitals training the student nurse. It says that "the hospital is provided with no margin for educational needs to pay instructors, to provide text-books, teaching materials, or others of the simplest necessities for a school;" and the report seriously affirms that "schools cannot exist without instructors, without libraries, without class-rooms, and without teaching material."

The student nurse's time—three calendar years—is given in the service of the hospital. According to all the rules of fair play, the student is entitled to the expenditure upon her education and training of such equipment and teaching facilities as would equal the sum that her actual service would cost the hospital if no training school existed. The community owes at least this much, through the hospital, to the student nurse. This much she actualy earns on a cooperative basis, and such a provision would include no gift for educational opportunity as is so commonly provided in the other professions. To permit the hospital to provide less than this minimum is to countenance an exploitation of the student nurse. Moreover, where funds are limited, the sacrifice should not altogether fall, as it so frequently does, upon the training school. This, too, should be a public trust to see that the necessary sacrifices are more evenly divided.

The community should provide the hospital training school with sufficient funds and should exact that they be definitely expended for educational purposes.

We must face the fact that an increasing number of our graduating classes are entering the field of public health nursing; that few of them take post-graduate work; and that their serviceability to the community is commensurate only with the breadth of the educational requirements for entrance into the training schools for nursing and upon the adequacy of the curriculum provided during the under-graduate period.

The content of our curriculum calls, then, for thorough revision both on the side of theory and of practice. Assistant Surgeon General Pierce points out in the paper above referred to that the increased call for the public health nurse is the outgrowth of the shift in emphasis in the public health campaign from legal and restrictive to educational and constructive measures. Purification of water can be obtained by law, and quarantine of communicable diseases by restrictive measures; but, he points out, the larger problems of health require the intelligent cooperation of all individual citizens, and this, above all, depends upon the preparation and maintenance of a large body of public health nurses who are thoroughly conversant with modern social problems, social legislation, economics, bacteriology, industrial hygiene, and disease prevention, and who are tutored through courses in psychology and education in methods of teaching all these things to the people. He holds with Professor Winslow of Yale that the nurse "must be equipped with a knowledge of the economic conditions and sociological principles which intimately touch her at a hundred different points."

We must, somehow, provide means and further the desire on the part of so many training schools to deserve and command recognition as part of our professional and university educational order. It is a short-sighted policy which so guides the hospital and training school authorities that the training of the nurse subserves only or chiefly the immediate needs of the hospital. The better part of the most selfish community wisdom resides rather in looking upon the training school for nurses as an educational institution, responsible for the preparation of professional members of society who are concerned with the health and welfare of the community.

In reconstructing our curriculum, we have one decided advantage over the average educational institution in that our theory and practice are motivated and worked out in connection with real and immediate problems. Our apprenticeship method of nursing education in this aspect will prove a possession to be cherished. In the main we have come along the right road in our method of education. Our theory has been too scanty, and we have been too slow to meet changing conditions; but when we have incorporated into our under-graduate training the larger social implications of the technical work, and broadened out the scope of our under-graduate work to include the knowledge of disease prevention and health promotion, as well as nursing care, we shall, then, have an educational scheme which is superior to many in social usefulness and in attractiveness to students. This will require teachers in our nursing schools whose training has been of a high academic order. It will require women capable of readjusting and administering the details of our curriculum with a clear vision of the needs of today always before them. This means university training and opportunity, and we know that all these require endowment.

The public health nurse cannot afford to be denied training in contagious diseases, skin and venereal diseases, in orthopedic nursing, and in mental and nervous diseases. These can all be included through affiliation, or otherwise, but this training will necessitate the greatest care in the utilization of time devoted to practical experience in the technique of surgical, medical, and other essential branches of nursing. It will afford no waste in the repetition of technique beyond the point of sufficient skill. It will involve the elimination of indefinite repetition of bed-making and dusting, which to a great extent should be the work of an attendant. As I have pointed out elsewhere, wherever real conservation of the student's time can be accomplished, one can still hold fast to all that has proved of value in the way of orthodox training in technique and can, in addition, give to the student well systematized, academic courses in the sciences which underlie their profession, and which bring her a consciousness of the relation of nursing to modern social problems; for we know that more than a reasonable degree of technique and skill will be of little avail if its possessor remains unconscious of its significance to the needs of existing community life when she is called upon to apply it therein.

The university and college and, under certain circumstances, the normal school should be kept in mind as the place in which our educational plans and obligations may best be realized with the least additional expenditure and with the largest benefit to the student. Once the university comes to see the educational need of the nurse and to feel its obligation to the community to meet the same, it

is not so long a step to the realization of a centralized school for all the hospitals in the district. Such a system would indeed be a boon to the superintendent of the small hospital and training school who is struggling with the dual load of hospital administration and the education of students.

Let me recapitulate: The community needs, in the interest of its own public health, to regard training schools for nurses as an integral part of present-day professional and university education; and it needs to provide the hospital training school with funds that are in excess of the funds actually needed to run the hospital itself. The community has failed to make this provision universally, not so much because it did not appreciate the service of the nurse, but because it is commonly believed to be within the province and within the means of the hospital alone to meet the situation adequately. This is a mistaken attitude. Professor Nutting of Columbia University, in 1916, in a paper on "A Sounder Economic Basis for Training Schools for Nurses," pointed out that, while lavish funds had been donated to women's colleges, to our great professional schools of medicine, law, journalism, and to our university schools of liberal arts and applied sciences, in the whole history of nursing "there have been but two large gifts for the education of the nurse."

Since Miss Nutting's paper was written advances have been made, and one of the most notable is here in Cincinnati where this Association is meeting. Our citizens have recognized the need for better nursing education and the obligation of the city departments concerned to make the highest use to this end of the facilities of the municipal hospital and the municipal university in the interests of the health and education of the community which these institutions serve and have given the under-graduate training the dignity of university rank.

By special arrangement of the two departments of the city government operating the university and the Cincinnati General Hospital, the hospital serves as a laboratory for the practice of all branches of nursing and offers cooperative assistance to the student nurse, while the university in its College of Medicine, School of Nursing and Health, and in its other colleges, provides the scientific instruction essential to the study and practice of nursing.

Thus upon a cooperative basis the city expends upon the student nurse body a sum approximately equivalent to the value of their service to the city through their nursing care of the city's sick in the hospital and the dispensary. Through the hospital, the city assures an adequate number of supervisors, graduate nurses, and ward assistants and, through the university, a special budget for a faculty of nursing and health in addition to such other facilities as its other colleges and departments can offer. The student thus pays for her education, not in tuition, but in service which tuition charges would hardly be able to purchase. The enthusiasm and devotion of the pupil nurse to her work in her eager student days are proverbial. We hope that Cincinnati will be even more generous to the student nurse, for it now expends upon other student groups in excess of their tuition fees the following sums: $345 upon each medical student; $129 upon each School of Household Arts student; $122 upon each Engineering College student.

The plan has passed its third year and has proved successful. It is one which might well be adapted for use in connection with state as well as privately endowed colleges and hospitals.

Briefly stated, the plan is as follows: By the city charter it is provided that "there shall be a school of nursing and health under the department of medicine of the University of Cincinnati and a director thereof. The director and faculty of the school of nursing and health shall be appointed by the board of directors of the University of Cincinnati. The director of the school of nursing and health shall be the director of the nursing department of the municipal hospitals, and the other members of the faculty of said school shall be appointed to such supervisory positions in the nursing department of the hospital as the board of directors of the university shall designate."

The By-Laws of the University provide that: "The director of the school of nursing and health shall have the title of Professor of Nursing and Health and shall be a member of the university senate."

All students entering the school of nursing must matriculate in the university with the same unit entrance requirements as students in the College of Liberal Arts.

In the three years' professional course the theory and practice are so balanced that upon its completion the University grants the usual diploma of graduate nurse and gives, in addition, two years of credit toward the degree of Bachelor of Science. The diplomas of nursing are granted at the regular university commencement with the other degrees and diplomas granted to students in the other colleges and professional schools. The course for these two additional years offers a wide range of electives, making it possible to adjust the student's program to the needs of pre-nursing or post-nursing; and yet it is restricted enough so that all the courses have some direct bearing upon the problems of public health, institutional management, and nursing in general.

Credit is given in the three-years' professional course on the same unit basis as in other university departments, one unit for one recitation or credit hour per week, for one term of fifteen weeks. Each month of cooperative nursing practice on the wards under teaching supervision has been credited as one such unit except for the probation term, when the four months of nursing practice count only as one unit.

The regular three-year program for the diploma of nursing on this basis totals 72 credit hours, the exact equivalent in credit hours of two years in the College of Liberal Arts. The 72 hours include 50 credit hours in class work and not less than 22 in practice on the ward, out-patient dispensary, and other services.

In accordance with the reorganization of the professional course of study in the school of nursing and health when we entered the university, each year is divided into three terms of four months each and the student nurse is freed from ward duty for the first semester following probation and for one semester in the second year for full academic work. Throughout the balance of the course four lectures a week in subjects fundamental to nursing and health are given coordinately with the different types of nursing practice in progress. The terms of nursing practice are so arranged as to permit each student to elect four months in the third year in the theory and practice of public health nursing, hospital and training school administration, or in any other branch of nursing in which there is a wish to specialize.

During the probation term, instruction is given the student only as follows: Lectures and demonstrations in elementary principles of nursing, 45 hours; lectures on history and ethics of nursing, 15 hours; lectures on personal and hospital hygiene, 15 hours each; lectures in elements of cookery, 15 hours, and laboratory, 45 hours; and lectures on introductory anatomy and physiology, 15 hours.

In this probation period the coordinating ward practice —six to eight hours daily—begins very early in the term; as soon, indeed, as the student has been taught bed-making and the simple beginnings of personal and ward hygiene. She takes over new nursing procedures from time to time as she receives instruction therein. All the time she is becoming oriented to the atmosphere of the hospital and the problems of nursing amid the conditions in which she wishes to become efficient, and where her eagerness to be at the bed-side can best be utilized for drill in the acquisition of skill in the more simple, monotonous ward procedures. This use of the probation period we hold to be the best method educationally. This early, practical ward work motivates the more thorough-going theoretical courses as no other plan can hope to do. Moreover, this arrangement is the more economical one, for it affords a working basis to guide one in the early elimination from the course of the unfit, before funds and a large amount of time and energy have been expended in giving fuller academic work to a candidate who may later prove unable to make the adjustment to the actual work of nursing, or whose chances for success and ability to assume responsibility in the more skilled and professional care of the patient are slight.

The advantages of alternating semesters of practical work with semesters of study which are free from the fatigue of ward duty are obvious. The groups relieved from the burden of ward work are able to carry well-rounded courses worthy of university credit, courses which give the student good habits of study and a fair background for her future work. In planning the eight-hour working day in the hospital this scheme of terms off duty for theoretical courses also proves more elastic and economical both from the point of view of ward management and that of cost of instruction. It requires less repetition of courses and less juggling of time and students to insure class work at hours when the student is sufficiently rested to profit by instruction. It also makes the planning of vacations possible with the regular number of staff and students.

During the first study period the course given is:

	Lectures	Laboratory
1. Chemistry	45 hours	90 hours
2. Anatomy and Physiology	45 hours	90 hours
3. Solutions and Introduction to Drugs	30 hours	
4. Medical Nursing—Lectures and Demonstrations, 45 hrs.		
5. Surgical Nursing—Lectures and Demonstrations, 45 hrs.		

During the second study period the course given is:

	Lectures	Laboratory
1. Bacteriology and Hygiene Lectures	30 hours	45 hours
2. Pharmacology and Therapeutics	30 hours	
3. Social Science Lectures	60 hours	
4. Psychology Lectures	45 hours	
5. Foods and Nutrition Lectures	30 hours	45 hours

During the periods of ward practice every day of the student's time must be carefully planned. The variety of training which can be satisfactorily given is one of the strongest points in the plan. We feel that no students should be denied, in addition to the usually required branches of nursing, training in the nursing of contagious diseases, in skin and venereal diseases, in mental and nervous diseases, and in public health field work, so the course as given to every student in the school is divided among the various services as follows:

Introduction to General Nursing Care	4	months
Medical Wards	2	months
Surgical Wards	2	months
Pediatric Wards	2	months
Contagious Wards	2	months
Orthopedic Ward and Gymnasium	1	month
Admitting Pavilion and Social Service	½	month
Eye, Ear, Nose and Throat, Skin and Venereal	1	month
Hospital Dict and Milk Laboratories	1	month
Operating Pavilion	1½	months
Gynecological Wards	1	month
Obstetrical Wards	2	months
Psychopathic and Neurological Wards	2	months
Elective in (Hospital Administration / or / Field Work in Public Health Nursing / or / Selected Ward Practice)	4	months

The lectures which coordinate directly with this nursing practice experience are planned to give the student a better working knowledge of her cases and opportunity to consider the community aspect of each disease. As given to each student these lectures are as follows:

	Lectures
Elementary Principal of Nursing (in Probation Period). Includes demonstrations	45 hours
Orthopedics, Genito-Urinary and General Surgery, and Gynecology	15 hours
Pediatric Nursing	15 hours
Eye, Ear, Nose and Throat, Skin and Venereal Diseases	15 hours
Mechano Therapy	15 hours
Obstetrics	15 hours
Contagious Diseases	15 hours
Introduction to Public Health Nursing	15 hours
History and Ethics of Nursing (in Probation Period)	15 hours
Psychiatric and Neurological Nursing	15 hours
and Demonstrations, Medical Nursing (first study period)	45 hours
and Demonstrations, Surgical Nursing (first study period)	45 hours
Pathology	15 hours
Preventive Medicine and Nursing	15 hours

It is assumed that, after two years and eight months so spent, the student nurse is ready to profit by a wise selection of four months' specialization in the public health nursing field, or hospital and training school administration, and the corresponding elective courses have been arranged as follows: Invalid occupation, advanced courses in public health nursing, journal club, teaching of public health, nursing methods, and hospital organization and training school administration.

We extend affiliation in contagious diseases, public health nursing, pediatrics and other nursing branches, and give class work upon the same cooperative basis as to our own students. We stand ready, as we should, to share our hospital and school facilities with as many schools as possible where affiliation is needed.

In conclusion we invite you to visit us and hope for constructive and helpful criticism. If there are discrepancies here and there, please remember that we are only three years old and that our infancy has weathered a war and a terrible epidemic.

Ohio Extends Nursing Service

The prospects for effective health work under the new Ohio health law is illustrated by the progressive plans of some of the counties and cities in Ohio which have heretofore done very little in public health work. For example, the Board of Health of Elyria, O., has provided

for a budget of $33,500, as follows: Commissioner, $4,500; six nurses, $9,000; dairy and food inspection, $2,500; clerk, $1,500; deputies, $2,500; automobiles, $5,400; incidentals, $5,100; clinics, $3,000.

The work will provide nurses who will visit every school house and examine every child for adenoids, bad tonsils, decayed teeth, malnutrition, and malformations.

HOSPITAL CONFERENCE POSSIBLE SOLUTION OF NURSING PROBLEM*

Registration of Trained Nurses and Attendants, More Satisfactory Working Conditions and Cooperation of Medical Profession Prime Necessities

By SARA E. PARSONS, R.N., Superintendent of Nurses, Massachusetts General Hospital, Boston

In this American Conference on Hospital Service to be organized, I see the first probability of a solution of the nursing school problem, because it will be the first time that all those who are interested in the problem, including the nurses, will have a chance to discuss it together; that is, we may solve it if, through the Conference, we reach the public for whom all departments exist and from whom adequate support must come if hospitals are to develop into their greatest usefulness.

Nursing schools are necessary to teaching hospitals, to at least a part of the medical profession, and to public health.

To the nurse, herself, the profession is no longer necessary as a means of livelihood. There are many other occupations in which she can earn more and work less. It is only when she loves her work that it becomes necessary to her, and it is because our leaders have loved their work that they have worked persistently against great odds to maintain fairly good standards. We have arrived at the stage where we know by experience what the trained nurse should be taught and the kind of hospital in which she can get her practical training. We also know what theory is required and have demonstrated two or three ways of getting it. We know and can prove by concrete example what influences militate against a school and what influences work favorably. There is scarcely time today to touch upon these things, but our statistics and our experience will be at the disposal of the Conference. We know that there should be trained nurses and trained attendants, and that both should be licensed before being allowed to practice as such. We never can have trained attendants until trained nurses are compelled to register after passing state board requirements. Naturally, young women who can get diplomas from some kind of a hospital and pass as trained nurses prefer to do so as a rule. The danger of partially trained people practicing as nurses is illustrated by an attendant who had experience in an Eye and Ear Infirmary. She was recommended by one physician to another who put her on a maternity case. The patient died of puerperal fever. The doctor blamed the nurse, asked where she was trained, and visited the superintendent of the school. He learned, too late, that she had never even qualified as an attendant, but had been dropped from the school.

Any kind of hospital which provides experience in all the major branches of medicine, or which by affiliation with other hospitals, can supplement its experience, may become a good field for the education of the nurse if suitable theoretical instruction and living accomodations can be provided. To be successful, hospitals must be able to relieve the student nurse of the domestic work that has hitherto consumed so much of her time, and they must supply a large enough staff to reduce her working hours to a reasonable number. Most necessary of all is a recognition of the nursing department by the medical department as its equal in dignity and in value to the community. Hospitals that take this stand are not seeking candidates so far as I have been able to learn. The acid test of a school is its graduate. If she is satisfied with her training after she has worked as a graduate beside other graduates she will be loyal to her school and work for its advancement. If she finds, however, that her training does not compare favorably with that of her associates she will either turn entirely against nursing, or she will recommend that her friends and relatives go to other schools, where the graduates are successful and recognized.

Hospitals have lost tremendously by not having held their nurse alumnae close to hospital interests. The things that are now most destructive to the development of nursing schools are the lack of professional status (nursing to be saved must be a licensed profession), the general apathy of our many medical friends toward our efforts to create and to maintain standards, and the active antagonistic propaganda of our few medical opponents. As an illustration, let me cite the editorial in the *Journal of the American Medical Association* some months ago which cruelly and unjustly attacked us at a time when nurses were rising splendidly at home and abroad to meet the great responsibility put upon them by the exigencies of the war. They not only did their own work but in addition helped out in the doctor's special province. They acted as anesthetists and clinical assistants.

At the height of the work at Base Hospital No. 6 there were three nurses working as anesthetists, one in the diet kitchen, another as housekeeper and another in the supply room, all positions that might have been filled by doctors or lay people. Yet so far as I know not one voice in the medical world was raised in our defense after that attack in an organ which represents the whole medical field in America. We know that only a few could have endorsed it. The pages, however, were closed to the nurses or our friends who attempted to answer the charge. Every such incident makes the profession of nursing less attractive and now that we are asking for relative rank with its insignia for army nurses in order that their authority may be recognized in the usual way and that they may have a definite and dignified position commensurate with their responsibilities—not asking for more pay or other emoluments—we are again met by the opposition of the general staff of the medical department. We have had many splendid endorsements from those who worked more closely with us, but unless we can win the staff over, the difficulties will be almost unsurmountable.

Yet, dreadful as our case is, it is not incurable. Numbers of young women want to be nurses more than anything else, and as soon as our schools are such that we are willing to have our own daughters and sisters train in them, we shall have more applicants. But to make our schools such, we must have a budget of our own or a sufficient endowment. That is where the public in general comes in. Then we must have licensure or obligatory registration and the loyal cooperation of the medical profession. If, through the Conference, we can discuss our problems from every angle and eliminate distrust and misunderstanding, I am sure the nursing situation of the hospitals will no longer be a problem.

*A report of the meeting of the American Hospital Conference on Hospital Service, held at Cincinnati, Sept. 8-12, 1919, was published in THE MODERN HOSPITAL, Vol. XIV, 4, p. 313.

DEPARTMENT OF DIETETICS

Conducted by LULU GRAVES.

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THE QUESTION OF CHILD FEEDING*

Modern Development of Child Feeding Distinctly American —Rigid Investigation Brings Modification of Old Standards—The Later Period and the School Canteen

By MARY SWARTZ ROSE, Associate Professor, Department of Nutrition, Teachers College, Columbia University, New York City

Child Feeding is a newcomer among topics for a dietitians' meeting, as it is a newcomer in the whole field of scientific feeding. Today it is the most pertinent task of the social service dietitian, an important subject for the teaching dietitian, and a problem not uncommonly presented to the administrative dietitian.

Several years ago I ran across an article in the *Archives of Pediatries* entitled "A Short History of Infant Feeding," which was most interesting, as it showed how very recently in feeding, as in other aspects of living, the child has had a place of his very own. According to Mixsell's brief historical sketch, there is no literature on infant feeding prior to the fifteenth century. In 1487 Paulus Bagellardus wrote *De Aegritudinibus Infantum*, which, interpreted, has a more modern sound—"Diseases of Infants." In this is recorded the fact that a mother commonly suckled her child two or three years, a custom that prevailed generally until the advent of modern medical science, and is current today where poverty, lack of an adequate substitute for mother's milk, or general ignorance make this the only way of preventing total extinction of the babies. Professor Sherman tells an interesting story of how, on his recent trip to Russia, passing through Japan, he met the celebrated Japanese, Takaki, who freed the Japanese navy from the scourge of beri-beri. Being congratulated on his hale old age, Takaki replied that he was fortunate in that, being the only son of his mother, he was able to enjoy his mother's milk for five years!

Thomas Faier, author of the earliest English book containing anything on child feeding, *The Regiment of Life* (1567), called his first section "The Book of Children" and advised that a child must not be weaned until he has all of his teeth, and only when the moon is on the wane.

Artificial or mixed feeding is not mentioned in literature until the eighteenth century. Artificial foods were limited to bread and pulse; cow's milk is not included. "Water pap" (bread and water) or meat broth might be given on the appearance of the first tooth, a chicken wing on the appearance of the second, followed, if desired, by "small beer with egg beaten in."

Michael Underwood, Licentiate in Midwifery of the Royal College of Physicians, London, published in 1793 *"A Treatise on the Diseases of Children with Directions for the Management of Infants from the Birth."* He is said to be the first who seriously attempted to find a substitute for breast feeding. He recommended cow's milk, with barley water as a diluent, and condemned the use of "water pap." He seems to have been a most progressive physician, calling attention to the necessity of scalding milk receptacles at least once a day, and even recommending that the milk be boiled. The milk, however, was to be as new as possible "since milk as an animal juice probably contains some fine subtle particles which evaporate on being long out of the body." He is much interested in "Dr. Smith's new feeding pot," shaped like a gravy pot with a long spout arising from the bottom and pierced with only a few small holes at the end, which was covered with a piece of vellum, washing leather, or parchment, soft and pleasant in the infant's mouth. This seems to have been a great improvement over the cow's horn of 1783, punctured at the tip, and furnished with a kind of nipple made of two pieces of parchment or leather sewed together and tied about the tip of the horn so that milk was sucked out between the stitches. Underwood warns that any child brought up on it is in danger of "falling into the watery gripes!" And no wonder, considering the impossibility of cleaning it! The mortality of artificially fed infants at that time was terrific. Forsythe's estimate for London from 1780 to 1816, is that it was 80 per cent.

Michael Underwood wrote fully seventy years before Pasteur published his first paper on the cause of fermentation. It is needless to dwell on the advantages which have come to little children through the development of the science of bacteriology, its practical application to the handling and keeping of milk, and the efficient supervision of the milk supply exercised by our great cities today. The conservation of child life resulting from this is a commonplace to all dietitians.

Weaning time was once fraught with dread. It was put off as long as possible. Today the strength of the mother is conserved, and often the child benefited, by a fearless shortening of the period of maternal nursing. Weaning time is whenever it is safe to give a child a substitute for mother's milk, not only free from harmful bacteria, but so adjusted to his sensitive digestive tract as not to cause any disturbance, and so adapted to his ultimate food needs as to supply every essential for growth. This is a considerable responsibility, but nowadays we shoulder it without much anxiety at nine or ten months, often earlier. As soon as the safeness of milk was assured through pasteurization, the time was ripe for attention to the baby's digestive powers, and there arose great pediatrists, like Dr. Abraham Jacobi, who has just closed such a long and wonderful career in New York City. This dean of babies' physicians established the first medical clinic in the New York Medical College in 1860. He helped to lay the foundations for rational milk modification, through proper dilution, modification of the properties of the curd, and changes in the proportions of protein, fat, and carbohydrate in the mixture.

There came on the scene in his early practice also a host of "infant foods," the greater number of which were largely cereal preparations serving to modify the cow's milk curd, but for which all sorts of extravagant claims were made. Now that infant feeding is better understood, these have settled fairly well into their proper place; their manufacturers do not make for them such extravagant claims, and the rosy-pink child who has A's food added to his milk is not held up as a product of A's food, but of milk effectively adjusted to his digestive system.

*Read before the Second Annual Convention of the American Dietetic Association, Cincinnati, Sept. 8-12, 1919.

The modern development of child feeding is distinctly American, and another significant epoch was ushered in by Dr. Rotch of Harvard, known as the father of the milk laboratory. He was responsible for the establishment of the first place where milk of undoubted purity and known composition, made up according to prescription, could be obtained by the public. Westcott, writing in the *International Clinics* in 1900 on the "Scientific Modification of Milk" says: "Till then (1892) there was no rational system of infant feeding. . . . We have come to think of milk mixtures in terms of percentages of ingredients. In percentage mixtures any one element may be altered without disturbing the others. Some babies cannot take milk undiluted until the end of the second year. Many infants suffer from overtaxed digestion." The writer goes on to review rules as to the best percentages for different ages and methods by which the most accurate results may be obtained. The "percentage method" was then in full vogue, and all sorts of tables and other devices for making formulas to yield desired percentages may be found in the various textbooks on practical dietetics, though the elaborate system then in use has given way to a great extent before a simpler plan. Much can be learned about practical feeding from study of the percentage method, and it still serves as a valuable aid in critical situations. It was not so much a "method" as a form of expression; and thus investigators passed on their experiences in adjusting food to the digestive capacity of infants.

Every student of dietetics is more or less familiar with the development of the energy concept in nutrition, and the experimental work with the respiration apparatus and calorimeter to determine human energy requirements. Here again, the child is the latest subject for investigation. The literature on energy requirements of infants has been fully reviewed by Benedict and Talbot (1914).

By 1910 we find the calorie taking a definite place in the minds of progressive pediatrists. At the present time we have fairly definite energy standards for the first year: first 3 months, 110-100 calories per kilogram; second 3 months, 100-90 calories per kilogram; third 3 months, 90-80 calories per kilogram; and fourth 3 months, 85-75 calories per kilogram.

The recognition of the law of the conservation of energy as an operative force in human diet is the basis of the modern science of nutrition. The calorie has been somewhat decried as an aid in child feeding, or in fact, in any feeding. This attitude reminds me of the old fable of the Blind Men and the Elephant:

"It was six men of Indostan
To learning much inclined,
Who went to see the elephant
(Though all of them were blind)."

You will perhaps recall that

"The First approached the elephant
And happening to fall
Against his broad and sturdy side,
At once began to bawl:
'God bless me, but the Elephant
Is very like a wall.'"

While the second feeling of the tusk, cried:

"To me 'tis mighty clear
This wonder of an elephant
Is very like a spear!"

And the third

". . . . . happening to take
The squirming trunk within his hands
Thus boldly up and spake:
'I see,' quoth he, 'the Elephant
Is very like a snake.'"

Those who were successful in infant feeding through application of the proper sanitary precautions and skillful adjustment of the food to babies' needs were sometimes content without further investigation although they had felt only a part of the nutrition elephant.

Any complete feeding program must take into account this most prominent requirement of the living organism—namely, an adequate supply of energy. Without this growth is impossible, no matter how well selected a diet may be in other respects. Whether secured consciously by direct calculation, or unconsciously through long practical experience in judging amounts of food which will make a given child prosper, the calorie is fundamental. Like the air we breathe or the water we drink, it is one of the vital things, and no blind philosopher, hanging to some wisp of truth will delude the open-minded with his cry: "The elephant is very like a rope!"

On the other hand, to have felt the elephant's knee is no justification for shouting "the elephant is very like a tree." Besides calories, there must be protein adequate in amount and kind. Consideration of amount is old; while consideration of kind is new. To Emil Fischer, who has only just died, we owe the first steps in solving the mystery of the chemical constitution of protein. The amino acid has become an every-day concept in nutrition, and proteins are "adequate" or "inadequate" for growth according as they do or do not have certain amino acids in their molecules; they are quantitatively more or less efficient according to the proportions of these same amino acids. We have passed the periods both of judging the protein in a baby's diet solely by its digestibility and of considering the amount without reference to the source. Thanks to the work of Hopkins in England and Mendel and Osborne in this country, supplemented by that of McCollum, we appreciate milk as a source of protein today in a new sense, knowing its proteins to be of a quality unexcelled for growth and capable of rendering very efficient proteins of much poorer quality when used with the foods containing them—cereals, for instance.

During the time of the investigations which have led to this new valuation of proteins, there developed in pediatric circles a distrust of fat in infants' diets, first in Europe and then in this country. Up to about 1907 milk protein had received most of the blame for the indigestion of babies, and the attenuation of protein in percentage formulas had been carried to an extreme degree, with high percentages of fat, often making the total fuel value of the diet higher than the child's actual needs. Then it was shown that fat was as frequent a cause of indigestion as protein, and we had

"the men of Indostan
Disputing loud and long,
Each in his own opinion
Exceeding stiff and strong,
Though each was partly in the right
And all were in the wrong."

The final result was a modification of the old standards, the employment of whole milk rather than top milk for modification, and less emphasis on the exact percentage of each ingredient, inasmuch as good digestion was more easily secured with lower proportions of fat. Formulas are now constructed on lines as simple as the following: One and one-half ounces of milk per pound of body weight (which insures sufficient protein), added carbohydrate food to make up the total fuel requirement, and water to make a volume within the capacity of the child and at the same time increase digestibility by considerable dilution.

In 1910 the revolt against fat had gone so far that skim milk was advocated as an adequate food for growing ani-

mals. But the researches of Stepp, McCollum, Osborne and Mendel, made evident (by 1915) that there was a hitherto unsuspected value in the fat of milk, due to the presence of the fat-soluble vitamine. Vitamines have been distinctly recognized as essentials of diet since 1912, by which time McCollum had pointed out the growth-promoting properties of water extracts of certain foods, designated the effective agent as "water-soluble B" and identified it with Funk's "vitamine" curative of beri-beri. When the fat-soluble vitamine was added to the category of dietary essentials, a supply of milk was perceived to be peculiarly important for growing children. Thus within a few years milk had been raised to a much more important place in the dietary. At the first Child Welfare Exhibit in 1910, the then novel exhibit of the fuel equivalents of one quart of milk provoked a storm of skeptical comment, and we had to take statistics in black and white to prove that a quart of milk was equal in energy value to nine eggs or one-and-one-half pounds of beef; now we recognize not only its energy value but also its incomparable proteins, its fat-soluble and water-soluble vitamines; and finally its rich and varied supply of ash constituents, with the exception of iron. And even in regard to iron, Sherman has furnished evidence that what is present, though small in amount, is remarkably well utilized.

One finds a considerable prejudice against milk in some quarters. I have been told that I give my own child too much milk! And I have often been called to the defense of the slogan "A quart of milk a day for every child." It must always be remembered that standards like this are for the normal child and not for the special case brought to some physician. What is done then is not a criterion of what should be done in general. Milk goes so far toward insuring a diet easy to digest and adequate in all essentials of nutrition, that it certainly deserves a fair trial. I think the prejudice against it arises from perceiving only the "tail" or the "trunk" of the nutrition elephant, or from failure to appreciate just how it needs to be supplemented.

Most recently there has been taken into the family of vitamines a third member, "Antiscorbutic C." To the researches of Hess we owe perhaps most of all the recognition in 1919 of a definite substance which prevents or cures scurvy. We owe to Hess, also, the warning that the symptoms of subacute scurvy resemble some of those of general undernutrition, e. g., failure to make normal gains in weight, and a tendency toward anemia. Now milk is not specially rich in the antiscorbutic vitamine, and when heated it rapidly loses such antiscorbutic property as it formerly possessed. There is recent evidence, too, that the diet of the cow affects the amount of this vitamine, so that it is likely to be smaller in the winter time. In view of these facts, there is no doubt that children receiving large amounts of milk might still show signs of malnutrition which would be cured by putting the child on a general mixed diet. It does not follow, however, that as good or better results would not have been obtained with the same amount of milk and a liberal supply of some definitely antiscorbutic food, like orange, tomato or potato.

The recognition of these facts has led to a great change in the time when fruit and green vegetables are added to the diet. For artificially fed babies orange juice has been given successfully at one month, and tomato juice at three months, the amount necessary to counteract scurvy being well borne. So, too, with regard to iron. The main choices among sources of iron for little children are green vegetable juice or pulp (carefully strained), egg yolk, and beef juice. Formerly beef juice was used practically to the exclusion of everything else. But most babies can be readily accustomed to spinach or peas, or a mixture of vegetables, and these have the advantage of being rich in the water-soluble vitamine, while beef juice is poor in all vitamines. It is an expensive luxury in children's diets, to be used when other iron-bearing foods are unavailable or cannot be made acceptable. While high in iron, there is need of experimental work to determine the exact quantity and the extent to which it is utilized. Egg yolk is a rich source not only of iron, but of the fat- and water-soluble vitamines. Owing to its high content of fat along with protein, it is not to be used in unlimited amounts, and has been sometimes overdone, so that the egg, like milk, has received a good deal of unfavorable criticism. Half a teaspoonful of egg yolk a day is enough for a three-months-old baby and a half yolk for a six-months-old baby, but most children a year old can take a yolk four or five times a week. Where eggs do not agree with a child they certainly should not be forced. Their cost makes it fortunate that we now recognize in green vegetables such an admirable substitute.

McCollum has pointed out most clearly the important place of green vegetables in human dietaries as sources of both the water-soluble and fat-soluble vitamines. Many of these foods are also antiscorbutic. Add to these qualities a rich quota of iron and one has an ideal supplement for milk. Thus orange juice for the antiscorbutic vitamine and spinach for the other two vitamines and iron, make good the natural deficiencies of milk. The remaining problems in a child's diet are sufficient fuel and, as soon as teeth have appeared, food that demands mastication chosen with regard to ease of digestion and avoidance of constipation. Those who feed children should have a very clear idea of the rôle of different foods in the dietary and which ones are easy to digest naturally or can be so prepared as to be no great tax on the alimentary tract. An adequate diet is a definite complex, built, according to plan, from a variety of materials. Just as the elephant of the story is not a wall, a snake, a tree, a fan, a spear, or a rope, the dietary is not calories, nor protein, nor ash constituents, nor vitamines, but all fitly joined together in due proportions. Dietitians should be helping to develop methods for testing easily the adequacy of diets, especially in institutions. A great deal of work of this sort has been done by the Food Division of the Sanitary Corps of the United States Army. It should not be lost but used and improved.

I have dwelt upon feeding in infancy because here the modern trend is most distinctly shown, and practice most highly perfected. I believe American babies are better fed than any others in the world. One point which perhaps deserves mention is the present day recognition of the fact that other things besides food play a part in good nutrition. The modern way makes good babies, not only because their food needs are better understood and more skillfully met, but because emphasis has also been placed on regular meals, proper sleep, plenty of fresh air, and freedom from fatigue and excitement. Practice has changed somewhat with regard to the number of meals, but there is no deviation from the rule of scheduled feeding. Any schedule is better than none, but that schedule is the best which gives comparatively long intervals between meals and provides for unbroken night rest as far as possible.

Next to the baby, the child of school age has come in for the most attention. The school canteen for the very poor existed here and there in Europe since 1790, when Count Rumford started soup kitchens in Munich. A great impulse toward extension of school feeding came in England at the time of the Boer war. Great numbers of men

of military age were found to be physically unfit for service, and this deplorable condition was traced back to poor nutrition in childhood. The classic tests of the value of one good meal a day at school in the City of Bradford and elsewhere in England, are admirably reviewed in Louise Stevens Bryant's *School Feeding*. Such experiments established beyond peradventure the beneficial effects of suitable food on the health of school children. School feeding has been increasing steadily in the United States, especially in the last ten years, largely through the efforts of home economics teachers, and particularly in the rural districts has the warm meal at noon been widely extended.

All this has stimulated inquiry into the actual food requirements of school children. Scientific information is still scanty. In the summary by Sherman and Gillett of the recorded data on *Food Allowances for Healthy Children*, there are 381 observations from which to determine energy requirement for the first year, while for succeeding years there may be one, two, or three, and sometimes none at all. Very recently one of these gaps has been filled in by DuBois's interesting studies on the basal metabolism of boys. A small group was studied twice, once when the boys were 12 and 13 years old and again when they were 14 and 15. In the first instance, the basal metabolism averaged 25 per cent higher than for adults, while in the second case it was about 11 per cent higher. There are no similar studies of girls of corresponding ages.

From such data as we have, we may assume that the daily energy requirement of children is so high that they cannot grow at the normal rate without good appetite and good digestion, and one of the special needs of the school child, as well as of the infant, is to have his diet so selected and his meals so arranged that he can ingest day after day from half again to twice as much food as would suffice for an adult of the same size without undue tax on the alimentary tract. This is why, in addition to meeting the quantitative requirements of childhood, expressed in terms of high energy, proteins efficient for growth, a rich and varied supply of ash constituents, and a liberal supply of vitamines, the diet of school children should emphasize regularity of meals; an adequate number of meals with food well distributed among them; bland and easily digested natural foods such as milk, cereals, bread and potatoes; simply prepared foods, free from high seasonings. This is also why, along with this food selection, there must be plenty of sleep, freedom from overwork or excitement, and intelligent education in eating habits.

Perhaps the greatest gain of the past few years is higher ideals of health and means of practically measuring health. Here again, history begins with the baby. Baby health contests all over the country showed people that every baby that looked pleasing to its parents was not up to normal. Chagrined parents were through pride impelled to find out why their children were not prize winners and apply the remedy, more often than not better feeding. The growth of the school lunch movement directed attention to the health of the school child. Investigation in all our great cities revealed high percentages of undernourished, and the onset of the war raised these alarmingly. Studies by the Bureau of Child Hygiene in New York City showed in 1914, 5 per cent undernourished; in 1915, 6.5 per cent; in 1916, 15.6 per cent; and in 1917, 21.6 per cent. Disturbed by these figures,, and anxious to extend school lunches to a larger number, the Child Health Organization was formed in New York City, and soon made national through affiliation with the United States Department of Labor. This organization has carried on a campaign for the weighing of school children, and comparing of weight and height with standard tables, using those long familiar to some of us, prepared by Dr. Wood. This summer in New York City, in cooperation with the public schools, it has brought the children together to see and hear Cho-Cho the Clown, who goes through the health program of the child's day in his own inimitable fashion, and fixes ideas of health and diet in the minds of his youthful admirers.

For the idea of the health class, or nutrition clinic, we are indebted to Dr. Emerson, of Boston, who was the first to take advantage of group rivalry as a motive for health. It is proving a very effective means of teaching children about food. This summer I have had the pleasure of conducting such a clinic in connection with one of the play schools under the auspices of the Federation for Child Study. The one at Stuyvesant Neighborhood House was selected because of the large number of undernourished children in attendance. Twenty-five advanced students of dietetics at Teachers College participated in the work, under the immediate guidance of one of our staff, Mrs. Gertrude Gates Mudge. There were about seventy-five children between the ages of three and fourteen, and the clinic was held once a week. The mothers were urged to attend, and we usually had from twenty to twenty-five of them. Certain children were assigned to each student, and she visited them in their homes between sessions. At the clinic we talked to the children about food to make them big and strong. It was a great day when little Abie, six years old and seven pounds under weight, three teeth out and a bandage around a battered head, marched up to the platform to receive congratulations upon half a pound of flesh!

There were the usual evils to fight—late hours, irregular meals, food according to the whim of the child, often no provision of the kind he ought to have at all. But what the child wants he is most likely to get in these East-Side homes; so we worked to create new desires in the children. When Johnny wants to have milk instead of coffee for breakfast, so he can get a red star on his weight record at the clinic, mother will make an effort to get him milk if she is the right sort of mother, and most of ours were. One mother got her son a new cup and straws at the drug store because he could not get up much enthusiasm for the taste of milk at first, and the new tools helped. We gave the children samples of some of the foods they ought to eat, and showed the mothers how to make them. When they saw the children eating them at the clinic and had a chance to taste them, too, they were encouraged to try them at home. Excellent lunches were served at the school, a substantial noon meal, and milk and crackers in the afternoon; and a part of the object of the clinic was to help induce the children to eat the food so provided. It was strange, and they distrusted it. But they learned at the clinic that string beans help to make one grow, and ceased to pick them out of the soup. The clinic became so popular that one little girl who was round as a dumpling wanted to get thin so that she might come.

With milk stations for the babies, school lunches and health clinics for the child of school age, there is some hope of a time to come when one-third of the men of military age shall not be found so far below physical par as to be unacceptable for military service. The revelations of the draft boards are enough to stimulate a great campaign for better nutrition, if people can only be made to realize how far bad nutrition is responsible for the general low state of health.

Latest to receive any measure of attention is the child of pre-school age—that is, the child from two years to

six. The Children's Bureau in Washington is busy collecting information which ought to benefit him. We need more data on his food requirements and more practical experience under scientific direction to formulate clearly the food needs of this period. This is the most critical period in the formation of good eating habits, a time demanding constant education in eating. Until weaning time, food is the same for every meal and eaten in the simplest fashion, week in and week out. The old way, when a child was weaned, was to take him to the family table and offer him whatever happened to be on it. This has cost the lives of many, and started many more on the road to dyspepsia, tuberculosis, patent medicines, and the like.

The child of pre-school age needs individual care. He is hard to feed in an institution because he needs constant teaching—how to feed himself and how to learn to eat what he ought to eat. Usually he needs four or five meals a day. I know that there is a growing tendency to give him only three, but it is frequently impossible for little children to meet their high food requirements in three meals unless the food is selected with extraordinary care. Like most other points in feeding children of this age, this point is open to discussion, and much more trained observation is necessary to determine the best general practice. Any dietitian who is fortunate enough to have such children in large numbers to care for should make some carefully controlled studies of this matter. Several times lately, the condition of children in institutions where only three meals a day were given has been brought to my attention because the children were not getting enough to eat, but so many factors enter into a determination of how much a child eats that one cannot pass judgment offhand. Personally, I believe that four meals, practically equal in bulk, are better during the second and third years, and three heavier and one light during the fourth and fifth. Undernourished children often need five meals.

Because he needs so much supervision, the child of pre-school age should be fed away from the adult table as far as possible so that undivided attention can be given to his eating. His food should be measured out day by day. Here, again, what quantities are most ideal is uncertain. There is no dissent among the well-informed, I think, from the rule of at least a pint of milk per day. How much more he can profitably take needs further study. The Children's Bureau is advocating a pint and a half per day; in my classes and in *Feeding the Family*, I suggest a quart per day. Over a quart is impractical. Whatever amount is found best for the individual child should be definitely set aside for him every day. In institutions, the amount of milk furnished per child is a good criterion of the general character of the dietary. The blandness of milk, the ease with which it can be made the carrier of cereals, eggs, vegetables, even bread, in children's diets, gives it an important place aside from the fact that it is almost a "mixed diet" in itself. It has gone out of style to call milk "the perfect food," since no one food is that for the human organism (except breast milk for the first year), and all foods are good in their way, but it is the broadest base for the construction of an adequate diet, since it tends to make good the deficiencies of other foods in a variety of directions.

Food materials for children's diets should be chosen to meet definite needs and others withheld for the sake of simplicity. More data on how much cereal, bread, butter, eggs, fruit, and vegetables, can be used to the children's advantage, would help in teaching child-feeding to the inexperienced and make such teaching more convincing to those who think themselves experienced. Cooked cereals have a definite place because, being warm, bland, dilute (three-fourths water) they are specially easy to digest and help to maintain the normal appetite, especially if fed without sugar. Children who do not have cereal for breakfast are apt to be underfed. Sugar has too high a flavor and is too apt to be used inadvisedly, disturbing the appetite and upsetting digestion, to be permitted without definite restrictions. The impression that children crave sweets I do not believe to be well-founded. Well-fed children who have been observed in large numbers, do not exhibit any such symptom. One finds the sugar-eating at its worst among those who are given pennies to spend and are constantly tempted by the small vendor to invest in lollipops and the like, just for the fun of the spending. It seems to me that half an ounce of sugar a day is enough for the small child, but I should welcome some quantitative studies on this point. In any event, sweet foods should come at the end of the meal, so as not to impair the appetite for the other food.

Meat, with its high flavor, is also apt to have an undesirable effect on appetite, and one finds few reasons for using it in diets for little children. With a liberal supply of milk the protein requirement is sure to be met, and it is yet to be demonstrated that there is any gain from a very high protein intake—that is, more than 15 per cent of the total fuel in the form of protein. Any advantage accruing from meat can usually be secured in some other way. It is well to have this generally appreciated, since the tendency, where money for food is limited, is to spend an undue proportion for meat, with the result that the diet as a whole is unnecessarily poor. Lusk's rule for the family, not to buy meat until three quarts of milk have been purchased, is a practical one for the home, and should be imitated in the institution.

How many eggs? This is also an open question. There is a great deal of difference of opinion as to how little children tolerate eggs. Not over one a day would seem a good limitation for children generally. One yolk a day is enough for the pre-school age (or a whole egg every other day) after the second or third year. There is practically no place for the egg white in the diet of the second year. Some extensive, unprejudiced investigation of this matter is most desirable.

I have already referred to the early introduction of vegetables into children's diets as the most striking application of recent scientific knowledge to the practical dietary. Vegetables should be staples from the first year on, strained as well as cooked through the pre-school years, and selected with a view to a rich iron content and general ease of digestion. The milk-and-vegetable soup seems to me one of the most important dishes in the dietary of childhood. It should supersede the broth, which really has nothing to recommend it, and is another expensive nuisance like beef juice.

Fruits, like vegetables, now have a place in children's diets at an early age, as I have already pointed out. Many of them have considerable fuel value, and most of them contribute laxative qualities to the diet. Through the pre-school age they should as a rule be cooked and strained. I consider the strainer the most important tool in the preparation of children's food. Only mildly acid fruit juices or sifted pulp of perfectly ripe fruit should be given raw. A good illustration of what can be done by following this rule is the banana. This fruit, as ordinarily eaten, rather green, is unsuitable for children; but when really ripe (as shown by natural spotting of the skin with black) and thoroughly mashed, it has proven easy even for children a year and a half old to digest.

Fruit once a day for the first and second years, and after that once or twice a day, seems a good rule. In cases of obstinate constipation, fruit three times a day may prove beneficial. Coarse foods are not desirable laxatives for little children. The eating of fruit between meals should be absolutely forbidden. There should be no breaking over the rule of food at meal-time only. Many people do not consider the fruit "food" and hence need warning.

Children must be trained to regular meals from infancy. But they should have their minds trained to the idea in early childhood, as a safeguard for all their later years. They must be trained in the pre-school period to many new foods. This should be done only gradually, one new food at a time, and with as much emphasis as possible on why the food should be eaten. It is fine to hear a three-year-old say "Oatmeal and milk make me grow," or "I have a little engine in me and I have to fill it with bread to make my legs go." Children must be trained to mastication. This begins as soon as the teeth come, but becomes a conscious process in these pre-school years. Practically every meal should include a portion of some kind of hard or dry bread requiring chewing. Training in table manners, in eating what is set before one, in dining rather than feeding, are important parts of making the child a good social being, though they are less important than the training in what is good food and how to eat it.

The methods of food education are not essentially different from the methods of more conventional education; there must be patient repetition to establish good habits, the same food over and over again in the same way, until the liking for it has been fixed. Given time enough, and excluding food actually harmful to the individual, one can teach any child to eat anything. Children's meals whether in the individual home or the institution, are really classes in the food school. We need better food education for mothers and more food education of children in school. The spread of general home economics teaching, the work of such agencies as the Bureau of Child Hygiene, the Child Health Organization, and most recently of the Red Cross, have inaugurated the larger movement for children's health. Dietitians, on account of their training and their varied opportunities, have a special obligation to forward this work of food education.

NEWS NOTES OF DIETITIANS

Miss Alice Hall, formerly of the Jewish Hospital, Philadelphia, has accepted a position as dietitian at Mount Sinai Hospital, New York. Miss Susan Walker who has been at the Mount Sinai has gone to Detroit, Mich., to manage a college club.

Miss Anne Boller of the Central Free Dispensary, Chicago, is spending a month visiting food clinics and other points of special interest relative to her work in the East. Miss Boller has, at the Central Free Dispensary, a clinic of 250 under-nourished children and 65 diabetics.

Miss Margaret Hoffman, A.B., University of Illinois, has accepted a position as assistant dietitian at New Haven, Hospital, New Haven, Conn.

Miss Sate Harris until recently dietitian at the Phillips House, Massachusetts General Hospital, has been made administrative dietitian of Massachusetts General Hospital, the appointment of Edith Lincoln as assistant dietitian in this hospital was mentioned in these columns in the October issue. Dietitians are watching with interest the progress being made in this particular dietary department because of the high standard which is being established. With Miss Harris and Miss Lincoln in charge, we anticipate that some very valuable contributions to dietetics will be forthcoming.

Miss Mildred Tabor has recently gone to the John Sealey Hospital, Galveston, Texas, as dietitian. Miss Tabor has been with the Food Administration since leaving the Illinois Central Hospital in Chicago.

Miss Mabel Little, who has been overseas for nearly two years, is now assistant manager of the system of restaurants in Columbus, Ohio, which have been known as the Busy Bee restaurants. The management, service, and name of these restaurants are to be changed. Miss Little has spent some time in New York City getting people and equipment for the new service.

Miss Elizabeth Masters has entered Speedwell Hospital, Guelph, Canada, as a student dietitian. Miss Masters has been county agent in the agriculture and home economics work of New York State.

GREETINGS FROM "OVER THERE"

Official Messages from France Indicate Widespread Interest in Convention of American Dietetic Association—Cooperation of Foreign Nations Seen

Of keen interest to those in attendance at the Second Annual Convention of the American Dietetic Association were the messages received from The Scientific Association for Food Hygiene, The Scientific Interallied Food Commission, and The Food Commission of the Society of Biology, Paris, France, and from the Du Pont Food Products Company, Baltimore, Md.

Many, however, were not present when these important greetings were read and, as several requests have been made for copies, the messages are here reproduced so that all our big family of dietitians may know the kindly interest and splendid spirit of cooperation which is being shown by those beyond the sea.

Message From The Du Pont Food Products Company, Baltimore, Md.

I can not express too strongly my feelings of regret for being unable to attend your convention. My factory is very busy, especially with export orders which are to be rushed. But I have worked so much that I had to take a rest. These lines ought to have been written more than a week ago, but I could not do it. Please excuse the delay.

I was so sure of having the pleasure of attending your convention that I wrote about it to Paris. The associations of which I am a corresponding member have sent me the enclosed messages which I would have been so glad to read myself to the convention. Will you please read same in my name?

Several documents are of interest to all, and I am ready to make excerpts of them for publication in THE MODERN HOSPITAL.

I would must appreciate if you would present and second a motion to the convention to endorse the work of the Scientific Interallied Food Commission, recommending the creation of a Scientific International Food Commission.

I would much appreciate clippings about the convention, and beg you to receive my best regards.—A. F. DU PONT.

Message of The Scientific Association For Food Hygiene, Paris.
(Société Scientifique d'Hygiene Alimentaire, Paris.)
(Declared of Public Utility by Decree of the President of the Republic, July 27, 1904.)

Presented to the Convention by A. F. Du Pont, Baltimore, Md.

President: Dr. Gariel, member of the Academy of Medicine, founded in 1666; vice-president of the High Committee of Public Hygiene of France.

Vice-Presidents: Dr. A. d'Arsonval, member of the Institute of France, founded in 1640; member of the Academy of Medicine of France, founded in 1666; professor at the College of France, founded in 1530; G. Griolet, Honorary Master of the Council of State of France; Dr. M. Letulle, Member of the Academy of Medicine of France, Professor of Medicine at the Sorbonne, founded in 1265; Dr. Moussu, Professor at the National College of Alfort; Dr. Charles Richet, Member of the Institut of France, Member of the Academy of Medicine, Professor of Medicine at the Sorbonne.

Members: Dr. Gley, Member of the Academy of Medicine, Professor at the College of France; A. Haller, Member of the Institut of France, Professor at the Faculty of Sciences of the Sorbonne; M.: Maquenne, Member of the Institut of France, Professor at the Museum of Natural History of France, founded in 1628; Dr. Paul Regnard, Member of the Academy of Medicine of France, Member of the Academy of Agriculture of France, founded in 1747, Member of the High Committee of Public Instruction of France; Dr. Emile Roux, Member of the Institut of France, Member of the Academy of Medicine of France, Director of the Pasteur Institute of France, President of the High Council of Public Hygiene of France; Mr. Jules Siedfried, M.P., former Secretary of State.

Secretaries: Dr. Henri Labbe, D.Sc., Professor at the Faculty of Medicine of the Sorbonne; M. Kohn-Abrest, D.Sc., Director of the Laboratory of Toxicology.

Director of Calorimetry: J. Lefevre, Professor at the Lyceé Pasteur.

General Secretary: J. Alquier.

Honorary members in the United States: Prof. Francis G. Benedict, Boston, Mass; Dr. Russell H. Chittenden, Yale University; Dr. C. F. Langworthy, Washington; Dr. Lafayette B. Mendel, Yale University.

Message of the Scientific Association For Food Hygiene, Paris.*

The Association sends its best greetings and wishes for the work of the Conventions and of its members, but regrets deeply that, after five years of war, the Association has all its members taking their vacation and cannot send communication of special works. It is the first time since 1913 that the board has stopped its meetings for three months. The present message was decided at a special meeting held by the few members of the board still in Paris. The Association is glad to proclaim that its works are made under the auspices of the famous Professor Atwater, whose works are in high esteem among the members of the Association.

The building of the new laboratories and mansion of the Association were just completed in 1914; the buildings are large and well equipped. A new laboratory for Calorimetry is under completion. The Association takes the liberty of calling the attention of the Convention to the proposed Scientific International Food Commission, and hopes that the conclusion of the report of the Scientific Interallied Food Commission will be endorsed by the Convention.

Such institutions will promote the co-operation of dietitians all over the world and help to impart a knowledge of foods, nutrition, and dietetics.

(Note of the Corresponding Member, A. F. Du Pont: I have here, in Baltimore, the bulletins of the Association since 1911 and will be glad to send excerpts (in English) of all questions which may be of interest.)

Message of the Scientific Interallied Food Commission, Paris.
(Commission Scientifique Interalliée du Ravitaillement.)

Presented to the Convention by A. F. Du Pont, Baltimore, Md., corresponding member.

Enclosed the text (in French) of the resolution and project of convention regarding the organization of a Scientific International Food Commission, as recommended by the above Scientific Interallied Food Commission, in its meetings of May, 1919, in Brussels.

The delegates of the United States to the Scientific Interallied Commission were: Chittenden and Lusk, Paris, March, 1918; Rome, April-May, 1918; and London, June, 1918. Dana Durand and Kellogg, Paris, October, 1918; Lafayette Mendel and Armsby, Rome-Naples, December, 1918; Alonzo Taylor and Dana Durand, Bruxelles, May, 1919.

Message of the National Association of Acclimatation of France.
(Declared of Public Utility By Imperial Decree of 1858.)

President: Edmond Perrier, Member of the Institute of France, Member of the Academy of Medicine, and Director of the Museum of Natural History, founded in 1628.

Presented to the Convention by A. F. Du Pont, Baltimore, Md., corresponding member.

The Association will be very pleased to come in closer touch with the American Hospital Association and the American Dietetic Association, through its corresponding member.

The Association deeply regrets that the news of the conventions in Cincinnati reached Paris after the last annual meeting of the season; the next meeting will be held in October.

The Association sends its best greetings to the members of the two conventions and wishes the best results to its works.

The Association has been interested in food and dietetics since its foundation in 1854; the last meeting of the Association was ended by the annual lunch, which was composed exclusively of rice cooked and prepared according to French, Italian, Chinese, and Tonkinese recipes, which we gladly send you by same mail and which will be translated into English by our corresponding member, A. F. Du Pont.

Message of the Food Commission of the Society of Biology, Paris.
(Commission d'Alimentation de la Société de Biologie.)

President: Charles Richet, Member of the Institute of France, founded in 1640, Member of the Academy of Medicine, founded in 1666.

Vice-President: E. Gley, Member of the Academy of Medicine, founded 1666, Professor at the College de France, founded in 1530.

Presented to the Conventions by A. F. Du Pont, Baltimore, Md.

The Food Commission of the Society of Biology of Paris sends its heartfelt greetings to the convention and its best wishes for fruitful results of its work.

The Commission has the honor of presenting to the Convention the full text of its works during the war, The Scientific Problems of Nutrition in France During the War*; also The Analytical Bibliography of the French works published during the war.

Hair-Cut and Bath Campaign Launched

The entire population of Poland by virtue of an official proclamation must have its hair cut, this being a part of the campaign which the government, in conjunction with the American Red Cross, is planning against typhus. Likewise every man, woman, and child must be bathed. Hair-cuts and baths are necessary because typhus is carried by body lice. Already there are 100,000 cases of the disease, and the health authorities have decided that, in order to stem the epidemic, more than 5,000,000 people must have their hair cut, be bathed, and reclothed.

*I will gladly translate and make excerpts of these important contributions to Food and Nutrition.—A. F. Du Pont.

HEALTH AND MODERN INDUSTRY

Conducted by BARROW B. LYONS
Superintendent Delaware Hospital, Wilmington, Del.

COMING OF COMPULSORY HEALTH INSURANCE*

The Logical Next Step Following Workmen's Compensation—Passage of Bill by New York Senate Indicative of Progress Toward Protection

"Compulsory health insurance for wage earners, including maternity benefits, is coming soon in the United States, despite the misrepresentations and active resistance of an interested opposition. It is the logical next step following workmen's compensation, which in eight years has been adopted by forty-one states and three territories and by the Federal government for its million civilian employees. And what opposition there is now to health insurance laws is of the same character as that directed against workmen's compensation eight years ago—opposition that in the light of successful experience now is seen to have been wholly misguided.

"The passage of a compulsory health insurance bill by the Republican New York Senate at the last session, as strongly urged by the Democratic governor, marks the high point of progress in this country toward such protection for the workers against sickness. For the first time a legislative body has taken this advanced action. It would also have passed the Assembly and become a law, according to the Governor, if it had not been prevented from coming to a vote on the floor of the house by arbitrary resort of the opposition to antiquated caucus rules. It is significant that the metropolitan press of New York was almost a unit in denouncing the defeat of this well-considered measure. This favorable action came only after several years of preparation and education. The health insurance bill was solidly supported by an imposing array of prominent civic, women's and social service organizations, by the State Federation of Labor, and many far-sighted employers and physicians.

"Just as workmen's compensation protects the workers against industrial injuries, so will health insurance protect them against the far greater hazard of ill health. To be effective, health insurance must be compulsory. No other plan will work. That has been found true in Europe in the ten leading countries that have tried out workmen's health insurance. Only by making it universal can it be made to cover large numbers and reach those who are most in need of this protection, those nearest the line of bare existence, to whom a spell of sickness so frequently means dependency. By making it compulsory, the heavy acquisition and administrative costs are eliminated, private profits abolished, and more adequate benefits made possible. Furthermore, this protection becomes

*This article is extracted from the address of John B. Andrews, secretary of the American Association for Labor Legislation, before the meeting of the National Conference of Jewish Charities, Atlantic City, 1919.

automatic, following the worker wherever his employment may take him within the jurisdiction of the law.

"Compulsory health insurance will serve to relieve charity of much of its already too heavy burden both by caring for the sick wage-earners when ill and by stimulating preventive measures. In urging this legislation the New York State Board of Charities reports that a very large per cent of dependency is due to sickness. In the eight states where official commissions have been studying sickness conditions among workers with a view to health insurance legislation, similar relation of sickness to poverty has been found.

PLEASANTNESS AS A BASIS OF TREATMENT

How the Medical Department of a Large Industry Won Over Its Patients by Adopting the Principles of Humanity

By C. F. N. SCHRAM, M. D., Medical Director, Fairbanks, Morse & Co., Beloit, Wis.

Starting with the idea that the medical department should be the most pleasant department in the plant, we succeeded in solving part of the problem of getting men to report accidents and return for redressings. We neither hired nor fired; nor was it up to us to boss the job of the patient or censor him because his accident was caused by carelessness. Treatment was the beginning and end of our obligation, and pleasantness is part of good treatment. Of course, we had to take histories of the accidents, but this part of our work was also done in a pleasant manner. Correction of poor safety habits was, we felt, up to the Safety Department, and we cooperated with that department in every way.

Our personnel was selected with the idea of having a force which was not only efficient, but congenial to the patient as well.

Delayed reports proved quite a problem. The worker got hurt and in his mind the injury was too insignificant even to make a report to his foreman, without thinking of going to the hospital. A few days later, due to lack of care, an infection set in. If the bruise turned out worse than he thought it was going to be, he presented himself for treatment. Many men gave the excuse that they were too busy to come over at the time of the injury.

The correction of this fault was not ours. So we sent out to the head of each department at the end of the month a statement telling him the percentage of delayed reports from his department that had come to our attention during the preceding month; that is, if a department reported three injuries in a month and one was delayed, the percentage of delayed reports from that department was listed as 33⅓. We added to this the key numbers listed as delayed. The first month only one department reported 100 per cent perfect—that is, with no delayed reports. For the last four or five months we have had four perfect records, and for the past two months we have reached a total of five. By providing the superintendent the key numbers we gave him or the foreman a chance to go to the worker and say, "You had an accident this past month, and did not report it immediately. Why?"

I might note in passing that all injuries two hours old, and over, are listed as "delayed." This problem may sound a little overdrawn to many manufacturers, but where there are many foreigners it is a vital one, and we feel that we have at least partially solved it.

To sum it all up in a single sentence: Most problems are human or deal with humans, and they are, therefore, best met by being human.

WHAT MEMBER OF THE STAFF IS TO TAKE THE INDUSTRIAL ACCIDENT CASES?

If Staff Member Is Employed by An Industrial Concern, Should He Be Granted Ward Privileges When Not on Ward Service?

The problem of what member of the staff was to handle the various types of cases coming to the Delaware Hospital under the Workmen's Compensation Act gave rise to the formulation of a set of rules. These rules govern dispensary and ward cases, but do not govern such cases as may be taken into private rooms. When a patient is taken to a private room he is considered a private patient of whatever physician he may select.

For the interest of hospital superintendents who have had similar problems, the rules adopted at the Delaware Hospital are here reprinted:

"The surgical chief on service shall be responsible for the surgical care of injured employees whose treatment is rendered under the Workingmen's Compensation Act of Delaware, unless a specific request is made by the employer at the time of admittance that the injured person be considered the private patient of a stated surgeon, or unless a standing agreement is made with the concern sending the patient that a certain surgeon is to treat their cases. An exception is also made where the case requires the services of a specialist.

"Only such industrial cases will be considered private cases as the chief resident of the hospital considers are in need of being admitted to a hospital bed. All surgical dispensary cases will come under the service of the surgical chief. If a question is raised by a member of the staff regarding the judgment of the chief resident as to whether or not a case should be admitted to a bed, the case shall be temporarily admitted to the detention ward pending the judgment of the medical board.

"When an industrial accident case applies for surgical attention as the private case of a stated surgeon, if the case is not one which needs to be admitted to a bed, it shall be referred to the surgeon's private office without treatment.

"Industrial cases which need only dispensary care shall be treated under the supervision of the chief resident, who shall be held directly responsible to the surgical chief on service for the surgical attention rendered, unless the case requires the attention of a specialist, in which event the specialist to whom the case is referred shall be responsible for the service rendered.

"When an industrial accident case is referred to the private office of a specialist, unless the case was sent in as a private case, it shall still be considered a dispensary case sent to the office of the specialist to serve his convenience. Charges for all such cases shall be collected by the hospital for the specialist in accordance with the surgeon's fee schedule adopted by the board of trustees.

"The chief resident shall examine every industrial case applying for admission in order that the closest cooperation may be obtained with industrial concerns and their employees. However, no industrial accident case for which admittance has been requested shall be refused when there is a reasonable doubt as to the need for admitting the case."

When a surgeon is in the employ of an insurance company the hospital does not attempt to fix a fee for his services rendered to injured employees insured under his company, neither does the hospital attempt to fix a fee for surgeon's services when the surgeon is in the employ of an industrial concern whose injured employees he is caring for at the hospital; but, when an injured employee is referred to a surgeon who is not employed by the concern from which he comes, or by the insurance company carrying compensation insurance for them, the hospital prescribes a schedule of fees in accordance with which the surgeons' charges must be made.

Under the laws of Delaware it is not always possible for the hospital to collect these fees for the surgeon, but an attempt at least is always made.

DISPENSARY AND OUT-PATIENT WORK

Conducted by MICHAEL M. DAVIS, Jr.
Director of the Boston Dispensary.
Please address items of news and inquiries regarding Dispensary and Out-Patient Work to the editor of this department, 25 Bennett street, Boston, Mass.

OUT-PATIENT DEPARTMENTS IN ILLINOIS

Chicago Health Centers Poorly Equipped—Need More Generous Support By Communities if They Are To Serve As a Protection Against Disease

Interesting statistics as to the status of dispensaries and out-patient departments in Illinois, particularly in Chicago, are found in the report of the Illinois Health Insurance Commission.

DISPENSARIES IN CHICAGO

General dispensaries		19
Special dispensaries:		
Eye, ear, nose, and throat	2	
Women and children	4	
Children	4	
Obstetrics	2	
Venereal disease	2	
Osteopathy, chiropractic, etc.	5	
Dental	14	
Tuberculosis	8	
		41
		60

ILLINOIS OUTSIDE OF CHICAGO

General dispensaries		8
Special dispensaries:		
Tuberculosis	18	
Infantile paralysis	11	
Other special dispensaries	8	
		37
		45

The above list does not include certain types of institutions. Those excluded are: "(1) dispensaries operated by city and county physicians; (2) clinics affiliated with the schools of chiropody, of which there are three in Chicago; (3) infant welfare stations, of which there are many in Chicago and a smaller number in other cities of the state; (4) hospital out-patient departments maintained by corporations for the treatment of employees; and (5) out-patient departments of the United States Marine Hospitals at Cairo and Chicago maintained for the treatment of members of the Merchant Marine."

These dispensaries provide medical service for a very large number of persons. "The number of visits made to them by patients during the last year approximated 860,000. Of this number 835,000 visits were made to Chicago dispensaries. How many different patients were treated cannot be so accurately estimated because of the system of records kept. There is a quite general acceptance among dispensary officials of the estimated average of four visits per patient. On this basis, 215,000 persons in Illinois sought treatment last year in dispensaries. Of this number, 208,750 visited Chicago dispensaries. Taken in relation to population these figures indicate that in the state as a whole seven out of every two hundred people sought medical service in these institutions. In Chicago the figures were seventeen out of every 200.

"The average cost of patients' visits was found to vary from eleven cents in institutions in which costs of heat, light, rent, etc., were not included, to 78 cents in the case of one Chicago dispensary with all such expenses included. It must be borne in mind, however, that practically all of the medical service in dispensaries is given free of charge by the attending physicians."

The conclusions regarding dispensaries in Chicago are thus summarized by the Illinois Health Insurance Commission:

"The Commission's investigation has shown that dispensaries are important factors in providing medical service for the poor, and for people of moderate means. The location of Chicago dispensaries is not well adapted to the needs of the people for ready access to such institutions. Many dispensaries need improved quarters, equipment, and record systems, and more doctors, social workers, and clerks. Fundamentally, the problem of better dispensary service is a question of more generous support on the part of the community. Dispensaries are a part of the community's equipment for protection against disease and for health conservation, and in the long run a community's health bears a close relation to what it is willing to spend for such protection and conservation."

A NEW BLOW AT AN OLD BUGBEAR

Pay Clinics and Compensation for Physicians Will Lessen Dispensary Abuse—Type of Needed Service Important in Determining Worthiness of Patient—Tendency Is To Extend Work To People of Moderate Income

A notable account of the condition of dispensaries in Chicago is given in the report of the Illinois Health Insurance Commission just issued. Shall hospital superintendents worry about dispensary abuse (namely, the exclusion of those patients who can afford to pay for private medical treatment), or shall they worry about dispensary efficiency (the furnishing of the best kind of medical service to the patients who are admitted)? The Illinois report furnishes the following answer to these questions:

"As dispensaries have increased in number and as their work has increased in volume, there has been the not infrequent criticism on the part of individual physicians and medical societies that dispensaries bestow medical charity upon people who have no valid claim to it, and who can well afford to pay for medical service. As long as dispensaries are primarily charitable institutions in which doctors receive no financial compensation for their services, they should be careful, as should other charitable agencies, to see that only those who need such free service receive it. Dispensaries differ greatly from each other as to the care they exercise in limiting their service to *bona fide* members of the charity group. Some admit every applicant; others make financial investigations of practically all their patients and exclude all whose incomes are above a fixed standard; still others fall between these two extremes, taking what seem to them to be reasonable precautions to keep out the financially ineligible.

"Careful investigations have been made at different times in Boston, New York, St. Louis, and other cities of a considerable number of dispensary patients, to ascertain their claim to free medical service. These investigations have shown that only a small percentage, from two to five, of dispensary patients are really able to pay for the medical service they seek to obtain free or upon payment of a nominal fee. "In our study of 2,869[1] fam-

1. This figure includes only those families for whom complete income statements could be obtained.

ilies in Chicago (charity cases excluded) it was found that 511 families, or 17.8 per cent, had received some form of dispensary service for one or more members within the preceding twelve months.

Budget studies made in North Chicago, and investigations made by the Bureau of Labor Statistics and by the War Labor Board indicate that for a family of five (man, wife and three children under fifteen), an income of $1,700 per year is necessary to meet all normal family expenses including sickness costs. Using this figure as a basis of classification of the 2,869 families, we find that 1,717 had incomes of $1,700 or over, or equivalent sums for smaller or larger families, as against 1,152 with smaller incomes. Of the 511 families receiving dispensary service, 102 were in the group with the larger income (with a minimum of $1,700 or its equivalent). Of these 102 families, 24 were given service in municipal tuberculosis clinics, infant welfare stations, or in special clinics established for after-care of infantile paralysis, which institutions, for obvious reasons, do not limit their service to any economic group. This leaves 78 families in the higher income group receiving medical advice and treatment in dispensaries which, in general, confine their service to people of very limited income. These 78 families are 15.2 per cent of the 511 families with dispensary records.

"It is well to bear in mind, however, that the type of medical service needed is important in determining whether or not a patient is worthy of dispensary treatment. One may be well able to pay a general practitioner for treatment of a minor ailment or one of short duration, but unable to pay for a specialist's service if needed, or for treatment continuing through a long period of time. On the basis of type of service needed, these 78 families divide into 55 whose condition of illness indicated the need of specialist service and 23 who, presumably, could have obtained all needed service from a general practitioner. From this analysis we may conclude that 23 families out of a total of 511, or 4.5 per cent, were recipients of medical charity which their economic status did not justify. This figure closely approximates the findings of the investigations in Boston, New York, and St. Louis mentioned above.

"The public health dispensaries, for example, those conducted by infant welfare organizations and by public or private agencies for the treatment of tuberculosis, usually treat all who apply regardless of financial ability. If pay clinics are established and with them a system of compensating dispensary physicians for their services, the question of dispensary abuse will tend to disappear. . .

"As stated above, there seems to be developing a tendency to extend the work of the dispensary beyond the group who seek its service as a charity, to people of low or moderate income. To the public this means a more extensive utilization of the medical skill, equipment, and organization found in the dispensary. It means pay clinics; adequate medical service within the means of a larger part of our population. From the standpoint of the physician it is a step in the development of group medicine or organized institutional medical practice."

Why Not Be a Miller, Bud?

Flour milling as a vocation for disabled soldiers, sailors, and marines is recommended by the Federal Board for Vocational Education in a pamphlet recently issued. The various kinds of work to be done are described, and the qualifications and the amount of schooling necessary to carry them on are given, as well as information as to where proper training may be secured.

LETTERS TO THE EDITOR

Architect Replies to Criticisms

To the Editor of THE MODERN HOSPITAL:

We are glad of the opportunity to answer the criticisms of the plans of the Blodgett Memorial Hospital at Grand Rapids which have come to us as a result of the publication of the article on it.

We wrote our client asking his permission to give you the cost of this hospital and have had a reply from him stating that, as the building was erected in 1915, the actual cost would be of little interest. He suggests that we send you the estimated cost of this building assuming that the contracts were let at this time. This cost, we believe, would amount to $819,026.

The power plant and laundry were placed in the hospital to save the additional expense of a separate building (which was found to be considerable); to avoid carting to and from the laundry and to provide better supervision of these two departments. The contours of the land made it possible to get a light basement and subbasement. All the power machines are on foundations isolated from the rest of the structure, and the ceilings of the boiler and engine rooms are insulated so that there is no noise or heat transmitted to the floors above.

To avoid unnecessary labor, we think that the proper place for the garbage destructor is in the hospital building. There should be no annoyance from odors if the refuse room is properly designed and equipped with a drain and hot water for cleaning.

It is much more convenient to have the large clothes sterilizer in the hospital building, as, with proper arrangement of air-tight doors, no odors can reach the other parts of the building.

It is obvious that at certain times of the day, with only two elevators, one car would be used for passenger service and the other for carrying patients to and from the operating department. In this case the elevators are about as far from the wards as could be planned and are equipped with noiseless door-closing devices, making it impossible for the doors to slam. If the elevators do not open on the main corridor, it is more difficult to handle the stretchers.

The treatment in this particular hospital does not call for more than one service room on a floor. To avoid a long carry, hoppers and bedpan warmers were placed in each of the ward toilet rooms. We believe it to be a debatable question whether one or two large store rooms are better than small closets for linen and supplies for each ward.

If a surgical dressing room is required for the number of patients cared for on each floor, we do not see how it could be better placed than near the center of the building.

You suggest that one or two more sound-proof labor rooms would be helpful in the maternity section. As this

"A Notable and Splendid Memorial Hospital" was published in the October issue, p. 268.

service is not large, we are certain that this would be an extravagance, for the two delivery rooms are used frequently for labor rooms and have proved thoroughly satisfactory. They are equipped with double doors, making them practically sound-proof.

The service here is quite different from most general hospitals, and the building has proved satisfatcory under actual working conditions during the last four years.

York & Sawyer, Architects,
New York City.

* * * *

First Training School for Nurses in Canada

To the Editor of The Modern Hospital:

Will you kindly correct a statement made by Miss Maude McLeod, superintendent of nurses, Vancouver General Hospital, Vancouver, B. C., in her article, "The Modern Trained Nurse," which appeared in the July number of this magazine, which I quote: "Sufficient to say that the Montreal General Hospital can boast of the first training school for nurses in Canada." The first training school for nurses in Canada was founded by Dr. Mack, of St. Catherines, Ont., and was opened in the year 1872 by a sister of Miss Nightingale's group, a superintendent, selected by Miss Nightingale herself to start this important work, at Dr. Mack's request.

The title of the school, which was authorized to issue diplomas, is "The Mack Training School for Nurses," in connection with the General and Marine Hospital, St. Catherines, Ont., Canada. An account of this school can be found in the "History of Nursing" by Miss Nutting and Miss Dock, in which the school is referred to as "the historical school of Canada." This school is still in existence and issues diplomas.

There is a slight difference between the years of 1872 and 1890, as stated in Miss McLeod's article as being the date of the Montreal General Hospital school. I might also add, that the Toronto General Hospital had opened its school for nurses previous to that date, under Miss Snively as superintendent.

M. Eugenie Hibbard.
Vedado, Habana, Cuba.

* * * *

Hospitals and Medical Care in Australia

To the Editor of The Modern Hospital:

You desire to learn "how we have solved the problem of medical and hospital care for people in the vast thinly settled parts." I am afraid the problem still awaits solution. Comparatively few of the country townships have public hospitals. In all townships sufficiently large to maintain a local doctor, private hospitals have been established either by nurses or doctors. These are mainly used by patients who live in the bush. The expression "living in the bush" indicates in Australia that the person lives several miles out of a township in a pastoral or agricultural area. "Bush" does not necessarily mean a forest; it may even connote a treeless plain.

Not many years ago, it was customary for the doctor to be called very many miles to see patients. Very often only one visit was practicable—it being impossible for the doctor to cover the necessary distances over bad roads when he had several patients widely apart. In some cases, the doctor would require a day or more to reach his patient.

The practice now is to bring the patients—particularly midwifery patients—to private hospitals. The doctor is thus enabled to devote more attention to his cases and the patient is saved the mileage rates which are necessitated by loss of time occupied in traveling.

These private hospitals are often very modest structures, but they are certainly useful under the circumstances. Transport of the sick in country districts is rather a difficult matter. The demand for an ambulance service in country districts is too small to justify any person or body maintaining such a service. Country roads are not suitable for motors but if they were, the cost ($300 for the cheapest) is beyond the purse of the average farmer. Consequently, patients have to be carried from the farm to the township by ordinary horse vehicles.

E. Robertson,
Secretary, Public Health Department, Melbourne, Australia.

"KALIFORNIA HOSPITAL KAFETERIA"

A Result of Lack of Dining Room Help—Facilitates Service and Lessens Expense—Meets With Entire Approval of Nurses

The cafeteria movement in hospitals which started in the East has reached the western boundaries of the country, the California Hospital at San Francisco having taken up the plan.

"We hesitated to try it," writes Anna A. Williamson, superintendent of nurses, in *The Pacific Coast Journal of Nursing*, "fearing that after going to the expense of putting in the necessary equipment, it might not prove all we wished it to be. But the serious problem of securing any help for the dining room hastened our decision."

It took about two weeks to make the necessary changes. During that time meals were served in a classroom adjoining the dining room, the overflow occupying the hall.

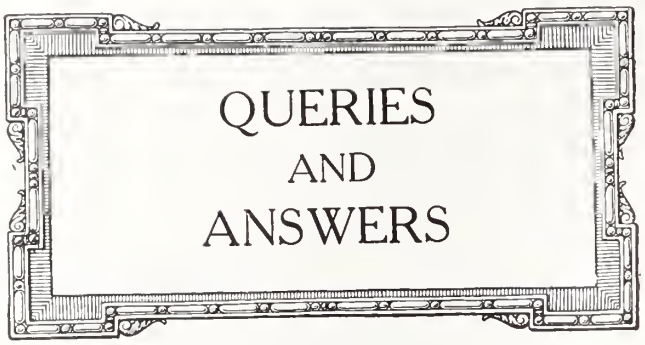
The line forms in the hall and on entering the room, keeps to the right. The trays come first, next the silver in boxes, then paper napkins folded so that they can be handled easily, next the butter in small patties, and after that the steam table. The first woman serves soup and meat, the man who stands next adds potato and gravy, serving the vegetable in a separate dish. One woman serves both dessert and tea, except when there is ice cream. In that event, the baker from the kitchen is pressed into service for the first rush, after which it is taken care of by a woman.

Bread, water, and milk are placed on the tables, with a glass at each plate, and salt and pepper at convenient distances. When served, the nurse goes to her place, removes the food from the tray, and places the latter on a side table reserved for that purpose. As soon as the last one passes the steam table, the man leaves his place and refills milk and water pitchers, replenishes bread plates, and removes soiled dishes, the two women behind the counter taking care of those who come late.

Breakfast is served from 6:40 to 7:50 a.m.; dinner from 11:30 a.m. to 12:50 p.m.; and supper from 5:30 to 6:50 p.m. The dining room seats eighty-five at one time and about 200 can be served between the hours given. The service has been in operation about two months, "and," says Miss Williamson, "we wonder how we ever endured the old way with its indifferent service, cold foods, and mussy dining room. Now we have hot dishes hot, cold dishes cold, and only take what we wish to eat, as we can quickly secure a second portion if we desire.

The midnight supper is not served on the cafeteria plan, but by one of the night men, the menu being arranged by the dietitian. At this meal, hot soup, meat or meat substitute, a relish or salad, a pudding, fresh fruit, or frozen dessert are served together with bread, butter, and hot coffee with cream.

The total initial expense of the undertaking was $294.67.



Organization of Hospital in a Small Town

To the Editor of THE MODERN HOSPITAL:

I am seeking information relative to the best form of organization from the standpoint of efficiency for a hospital in a town of about 25,000 population. Like all small towns, there are many petty differences so that it is practically impossible to get anything like unanimity of thought or action on any matter. The hospital we are operating is an old one and has always been sectarian, but we will have a new 54-bed building within a year. At present it is operated by an Advisory Board the members of which are representative women. The board leases the hospital for $1 a year from the board of managers, collects and disburses all money, and employs and discharges all help. The board of managers, over the membership of which there has been some contention, merely act as trustees for the $50,000 endowment fund. The hospital must remain sectarian, but we want the kind of organization that will get the most and best service out of every dollar for the people who use the hospital. I would also like to know how far in the interest of efficiency, women may be used on the managing board.

CITIZEN OF A SMALL TOWN.

Reports so far received, and results shown by the management of hospitals by women's board have not been encouraging, that is, where the women's board has really had anything to do with the actual management of the institution. In fact, the same thing may be said of boards composed of men, if these boards attempt to exercise executive control. The women's boards seem to have worked out well and have proved of great value as auxiliaries which have made money and furnished needed supplies, but they have made impossible working conditions and have stood in the way of hospital progress where they had actual control.

Your plan of making the hospital open-door and non-sectarian in its policy is the one which has always seemed best in a city of your size and in a hospital of this number of beds. The plan of 50 per cent representation on your board is a fair one, and really should not meet with opposition. If you should have a non-sectarian board, both men and women, representing the different elements for good in your community to act as advisors and to give support to your superintendent, you will be carrying out the functions of the board of trustees as it is considered standard to-day.

This board should not be large—not more than six or eight at the most. The rest of your members, to satisfy everybody and avoid hurting any one's feelings, could be formed into an auxiliary to raise money and to furnish things needed.

Your executive, responsible only to the central organization, should be an experienced superintendent. For an institution the size of yours, the best choice would be a capable woman who is a graduate registered nurse and she should be given entire charge of the actual running machinery in the hospital without outside interference. As we have said before, the function of the board of control is advisory and must be in the nature of a support—helpfully critical, not actually executive. It may be shown that end-results have proved this method of hospital administration to be the present standard method of efficiency. The older methods where the committee actually attempted the hospital management should go to the scrap heap, because experience has shown that they have brought friction and heartaches and have stood in the way of progress.

Try to make your people understand that the hospital means first an educational institution, a workshop for your physicians and nurses; a place where the welfare of your patients must come first, last, and always; and that petty personalities and factions are clogs in institutional machinery and an abomination in the sight of the Lord Almighty.

As they say, a prophet is of little honor in his own country, so perhaps if you should send for some well-known hospital administrator to talk to your people you might get quicker results. You may find some useful suggestions in Dr. Hornsby's article[1] on the standardization of hospitals.

* * * *

Ridding the Premises of Mice

To the Editor of THE MODERN HOSPITAL:

We have been practically overrun with mice. Can you suggest something which will effectually rid us of this pest?

HOSPITAL SUPERINTENDENT.

Getting rid of mice means eternal warfare. You will have to use traps, poisons, plug their holes with cement, concrete, or plaster and just keep everlastingly at it. You might try some of the standard paste exterminators if you have not already done so. If you follow their directions, the mice will come out on the floor after water and die there, when you will be able to throw them out and they will not give rise to odors.

The first thing to do is to set somebody on the job who will be responsible for it and whose duty it will be to keep at it. What is everybody's business is nobody's business and you will never be able to count on your nurses or your domestics.

* * * *

Pictures for Convalescent Rooms of Hospital

To the Editor of THE MODERN HOSPITAL:

Will you be good enough to suggest a list of suitable pictures for the reception and convalescent rooms of a 16-bed community hospital?

SUPERINTENDENT OF OHIO HOSPITAL.

The question you ask is of considerable interest and importance, for many times not enough attention is paid to the effect of his surroundings on the convalescent patient. I dare not attempt, however, to give anything approximating a complete list of pictures for your hospital, although I may suggest a class. The pictures should be cheerful subjects and as far removed from suggestions of a hospital atmosphere as possible. Water pictures are excellent, especially those showing the ocean in motion; grazing cows and horses in pasture are other good subjects. There are three suggestions in this selection: (1) nature, (2) repose and quiet, (3) getting away from hospitals and sickness. Among these classes I might mention: "A Sunset on the Desert"; "Sunset," and "Scene by a Brook," Corot; "Shorebound Waves," Rehn; "The Oyster Gatherers," Sargent; "The Fairy Pool," in colors, Jessie Wilcox Smith; "The Children's Hour" and "The Lord Is My Shepherd," Taylor; "The Bird's Nest," Baer; "Twilight and Poppies," Coleman; "The Brook,"

1. "Class V Semi-Public Community Hospitals," THE MODERN HOSPITAL, Vol. VII (November, 1916).

Couse; "Peace and Plenty," Inness; "A November Day," Mauve; "The Old Mill," Bunner; "The Smithy," Herring; "Song of The Lark," Breton; "Can't You Talk," Holmes; "The Wave," James; "The Angelus," and "Planting Potatoes," Millet; "Call to The Ferryman," Knight; "Hiawatha," Norris; "The Helping Hand," Renouf; "Holy Night," Correggio; and "The Windmill," Ruysdael.

These, many of which may be had in the Copley prints, range in price from $3 for one ten by twelve inches, to $12 for one twenty-four by thirty-four inches.

THE CHILD FOREMOST AMONG RECONSTRUCTION PROBLEMS

"Children's Year" Inaugurated to Counteract Destructive Tendencies of War in Regard to Child Life—Program Includes Betterment of All Classes

Because the war has, in large measure, tended to destroy his rightful heritage, the child now stands foremost among reconstruction problems of the country, says Sarah Mackler in *The Pacific Coast Journal of Nursing*. As a beginning of the solution, "Children's Year" is to be featured by the Children's Bureau of the Child Welfare Department.

A working program has been prepared, the plans being grouped. Four groups are concerned with the needs of normal children in their own normal homes, the fifth being the special problems of children whose homes have been broken up, or who, for any reason, need special care.

The success of the plan depends upon the activity of the local committees and the cooperation of individuals. The first community activity is the nation-wide weighing and measuring tests of young children.

As the life, health, and normal development of the child depend largely upon the health and protection of the mother, one of the most important topics is public protection of mothers, infants, and small children. Home care and income will also be taken into consideration, as infant mortality among babies of working mothers is found to be considerably higher than that among babies whose mothers do not have to work.

The burden of support should not be placed upon young children; hence cities should be on guard against special exemptions from state child labor and school exemption laws. The development of constructive measures to meet conditions which lead to the employment of children is urged.

The neglect of recreation for children, and special care for the blind, the deformed, the foundling, and the delinquent form part of the program. Among corrective measures advocated are the prevention of blindness by treatment of the eyes immediately after birth, the control of epidemics of trachoma, and the establishment of schools for the blind. The placing of deformed or crippled children in special institutions where the deformity may be corrected and where occupations suiting the degree of the deformity are taught, is also urged. The foundling and illegitimate child offer unusual opportunities for real service to nurses and social workers. The delinquent should have proper supervision and guidance to prevent its drifting gradually into a life of crime.

In order that the program of "Children's Year" may be successful, every large city should establish milk stations in the most densely populated parts, where mothers can secure a sufficient supply of good milk for their infants, and also obtain information as to proper care of them.

NEW INSTRUMENTS AND EQUIPMENT

VINCENZ MUELLER, Technical Editor,
GEO. W. WALLERICH, Associate Editor.

Please address items of news and inquiries regarding New Instruments and Appliances to the editor of this department, 327 Southeast Avenue, Oak Park, Illinois.

Portable Orthopedic Frame

This apparatus has been designed by Dr. R. D. Maddox, Cincinnati, Ohio, with the view to giving the surgeon who at times is called away from his hospital base a practical fracture and extension apparatus which he may take along with him without too much inconvenience. It should also be the apparatus of choice for the smaller institutions which, because of limited resources, are unable to acquire one of the more elaborate fracture and orthopedic tables, such as the Hawley or the Albee table.

This outfit combines in a comparatively small and portable form all the necessary and mechanical principles of the several types of supports now in use and will facilitate application of all forms of jackets, spicas, and other dressings required in general and orthopedic surgery.

The primary mechanical principles of this apparatus are essentially a horizontal base rod, a vertical head post, and a vertical pelvic post, clamped to the base rod; one or more vertical posts, placed beyond the pelvic post, or between the pelvic post and head post, and clamped to the base rod; one or more lateral rods clamped to any vertical post below and at right angles to the base rod, to form a lateral base; and suitable fittings for all the vertical posts, to support the springs, rods, or webbing bands on which the body rests. As this apparatus is intended to be used on a table or in a bed, any form of support other than the lateral rods under the base rod is unnecessary, but may be used. Additional support or traction for any part of the body is obtained by extending a rod or rods from a clamp on the base rod and attaching to this second rod the supporting fixture, or the bandage, or strap for traction. All rods or posts, not essential members of support, may be clamped lightly at a point of extension and, when so clamped, may be axially turned in either direction and locked at any point by means of a clamp, giving a powerful windlass action in all planes parallel or tangent to the base rod. Variations of this form are almost unlimited.

When the apparatus is to be used in the hospital only, it is, of course, not necessary to dismount it into the many parts shown in Figure 3.

The whole apparatus, when dismounted, goes into a case, the size of which is 26½ by 10½ by 3½ inches. The weight complete is 45 pounds.

* * * *

Self-Rectifying X-Ray Tube

Manufacturers of x-ray apparatus are now devoting considerable attention to self-rectifying x-ray tubes. A self-rectifying tube is one that rectifies the high-tension alternating current and, at the same time, generates x-ray.

Messrs. Green & Bauer of Hartford, Conn., and Chicago, have put such a tube on the market under the name of the "Renifar" self-rectifying x-ray tube, which warranted the manufacture of special closed-core transformers to operate it.

A transformer depending upon the "Renifar" self-rectifying x-ray tube to rectify the high tension alternating current, possesses many attractive features not found in other instruments for the generation of x-ray. Some of the many advantages are: (1) the short time and low milliampere seconds in which radiographs can be taken satisfactorily; (2) the reduction in capacity, bulk, and price of transformer; (3) the elimination of noise while operating; (4) the elimination of expensive and special wiring to make connections; (5) the elimination of moving parts; (6) the long life of the tube; (7) the elimination of interrupter when the tube is used from an induction coil on the alternating current; (8) great penetration.

Transformers operated in connection with this tube require from 10 to 12 milliamperes for a radiograph of any part of the body. The manufacturers state that, with such a tube backing up a spark of 6 inches and drawing 10 to 12 milliamperes, a hip of a 160-pound patient can be taken in 50 milliampere seconds, and a lumbar spine in 60 milliampere seconds. For fluoroscopic examination, only a few milliamperes are required to obtain an excellent definition.

The control of the vacuum is simple, and any resistance and milliampere reading can be obtained by manipulating the rheostat.

When the "Renifar" self-rectifying x-ray tube is used in connection with an induction coil on the alternating current, no interrupter is needed. The alternating current from the line is connected directly to the primary of the coil. The manufacturers claim that the tube will suppress the inverse current and the coil will be found to work 50 per cent faster. To prove their contention, tests have been made with an 8-inch induction coil that would not take the hip or lumbar spine, no matter how long the exposure. When using this self-rectifying tube, satisfactory radiographs of these respective parts were obtained within a reasonable time.

* * * *

The McKenna Fracture and Orthopedic Table

A fracture table designed for all classes of orthopedic work and provided with the means for making fluoroscopic examinations during extension has recently been placed upon the market at the suggestion of Dr. H. H. McKenna, of Chicago.

The table, constructed on a segment or unit principle, permits of the independent adjustment of the various segments.

The lowering of a segment or of segments out of the way of the surgeon leaves the patient suspended over the open space, thus effectually eliminating the strain to which a patient is subject when suspension is secured by means of elevation.

Great rigidity of the working parts of the table is combined with smooth, easy adjustment of these parts. The segments composing the table top are raised and lowered by means of a spoked handwheel and steel shaft, working in conjunction with worm gear and ratchet bars. A turn of the wheel elevates or lowers the segment as may be desired. Segments composing the body of the table and segments composing the leg section and arm section are supported by the ratchet bars in a manner which insures rigidity under great strain.

The table is distinctive in construction and in the method of adjusting the segments when it is used for operative work on the lower limbs. These segments for operative work on the lower limbs, two in number, work independently of each other. They can be swung out at an angle from the body of the table, thus permitting the operator to work in between the patient's limbs with perfect freedom. These segments supporting the lower limbs are constructed so as to permit of their being locked at any angle to each other and to the body of the table that the operator may find convenient in his work. The table is equipped with perineal posts and with adjustable traction attachments for securing traction on both the upper and lower limbs.

The table frame is made of steel tubing, finished in white enamel and mounted on rubber-tired castors; the castors are fitted with brake for locking and holding the table in one place when necessary. The table top is composed of segments made of angle steel and covered with sheet zinc, the zinc being brought down, around, and over the steel frames of the segments, making the table top easy to clean and keep clean.

BOOKS RECEIVED FOR REVIEW

The Blind: Their Condition and the Work Being Done for Them in the United States. By Harry Best, Ph.D. Cloth, pp. 763, $4. Macmillan Company, New York, 1919.

Rules for Recovery from Tuberculosis. A Layman's Handbook of Treatment. By Lawrason Brown, M.D. Third edition, thoroughly revised. Cloth, pp. 192, $1.50. Lea & Febiger, Philadelphia.

Hygiene and Public Health. By George M. Price, M.D., director joint board of sanitary control; author of Handbook on Sanitation, Tenement-House Inspection; Hygiene and Sanitation for Nurses; The Modern Factory. Second edition, thoroughly revised. Cloth, pp. 280, $1.50. Lea & Febiger, Philadelphia.

Principles of Nursing. By Charlotte A. Brown, R.N., superintendent of nurses in the New England Hospital for Women and Children; late instructor in the Boston City Hospital and Boston Lying-in Hospital Training School for Nurses. The Nurses Textbook Series. Cloth, pp. 257, with illustrations and glossary, $1.75. Lea & Febiger, Philadelphia.

Roentgen Interpretation. A Manual for Students and Practitioners. By George W. Holmes, M.D., roentgenologist to the Massachusetts General Hospital and instructor in roentgenology, Harvard Medical School; and Howard E. Ruggles, M.D., roentgenologist to the University of California Hospital and clinical professor of roentgenology University of California Medical School. Cloth, pp. 205, with 181 engravings, $2.75. Lea & Febiger, Philadelphia.

Urology. A Textbook of Urology in Men, Women, and Children, including Urinary and Sexual Infections, Urethroscopy, and Cystoscopy. By Victor Cox Pedersen, A.M., M.D., F.A.C.S.; major, Medical Corps, U. S. Army; consulting physician to the selective service headquarters in the city of New York; member of the American Urological Association, American Medical Association, etc. Cloth, pp. 991, with 362 engravings (of which 152 are original), and 13 colored plates, $7.00. Lea & Febiger, Philadelphia.

Pulmonary Tuberculosis. By Maurice Fishberg, M.D., clinical professor of medicine, New York University and Bellevue Hospital Medical College; attending physician, Montefiore Home and Hospital for Chronic Diseases, New York. Second edition, revised and enlarged. Illustrated with 100 engravings and 25 plates, pp. 744, $6.50. Lea & Febiger, Philadelphia.

Materia Medica for Nurses, A Textbook of. By A. L. Muirhead, M.D., Professor of Pharmacology, Creighton Medical College, Omaha, Neb. Cloth, pp. 183, illustrated, $1.50. C. V. Mosby Company, St. Louis, 1919.

The Higher Aspect of Nursing. By Gertrude Harding. Cloth, pp 310, $2 net. W. B. Saunders Company, Philadelphia, and London, 1919.

THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment, and Administration of Hospitals, Sanatoriums, and Allied Institutions, and to Their Medical, Surgical and Nursing Services

Vol. XIII *December, 1919* No. 6

CHRISTMAS A GALA OCCASION IN BOSTON CHILDREN'S HOSPITAL

Little Patients Forget Pain in Keen Delight of Holiday—Display Marvelous Lung Power on Christmas Morning—Santa Claus Brings Toys to Every Child

By IDA G. BUCKLEY, Supervisor, Children's Hospital, Boston, Mass.

CHRISTMAS in the Children's Hospital, Boston, really begins about a week before the twenty-fifth of December, when every day boxes and bundles of toys, candy, fruit, and all manner of goodies come into the hospital from its many friends. Somehow the secret is whispered through the halls and finds its way to the wards, the alert little Billy or Mary overhears a word or two, and it isn't very long before the smallest youngster knows that Santa Claus is on his way. Then, about three days before Christmas, a smiling nurse comes around with a pencil and paper and writes down Billy's name and age, and just what he most wishes Santa to bring to him. Everyone gets more thrilled and more excited over each succeeding tale, the nurse nods confidently, and Mike, who was in the hospital last Christmas and interprets the knowing smiles of the ward nurses for the other children, yells from his bed, "Even if you want an Ingersoll, and can prove you can tell time,—you'll get it!"

What wild enthusiasm when Santa Claus himself, the pack on his back fairly bursting with toys, comes around through the wards of the Boston Children's Hospital in the middle of the morning to give with his own hands the toys he especially saved for little children.

For the last eleven years, since she was but four years old, a little girl who knows what it is to be sick herself, and to wear splints, sends to each child in the hospital a beautiful gift, a toy, a book or an Ingersoll. These, with the dozens of books, games, drums, horns, mechanical toys, paints and crayons, soldiers and artillery, engines and automobiles, dolls and everything pertaining to dolls—in fact, with every kind of a toy a small person could imagine—make a fair-sized toy-shop of the room set aside to receive them. Two days before Christmas, the stockings of heavy, bright red cotton are brought out for another Christmas. Santa Claus tags, with the name and age and ward of each child, are tied to the tape by which the stockings hang. Then the nurses have their Christmas fun. Head nurses and supervisors can get just as much excited trying out a mechanical Charlie Chaplin as the seven-year-olds in the boys' ward, and, as has been proved by many Christmases, they thrill and

enthuse over the baby-dolls with unabated ardor each year.

A big seedless orange and a red apple fill part of each stocking, and the toys or books calculated to appeal to Tony or Rosetta most, fill it to overflowing. For every girl in the hospital, there is a doll, from a fully-dressed baby-doll or flaxen-haired beauty to the rubber doll which goes into the baby's stocking. For the babies are not forgotten, and even if George Washington Jones, Jr., who entered this world four days before Christmas, sleeps serenely unconscious of this most wonderful day, his red stocking hangs on his crib, with a pink rattle attached. Mr. George Washington Jones, Sr., his black face one broad grin, carries the treasures home the following Sunday to be kept for Georgie's future delight.

On Christmas Eve the choir boys of Trinity Church bring joy to the youngsters in the Boston Children's Hospital by the singing of Christmas carols.

Christmas Eve in the Children's Hospital, to all of us who have shared it, is one of the most happy, tender, and sacred memories we have. After dusk, when the wards, garlanded with greens and bright with shining Christmas trees, are filled with the soft rosy glow of red lights, the rector of Trinity brings his choir boys to the hospital to sing the Christmas carols. First, in the wide, white hall of the main building, their clear, boyish voices are raised in glad tidings. Up on the fourth floor, in the private ward, tired mothers, with hearts full of thanksgiving, their thoughts on that long ago Christmas in Bethlehem, and on that other Mother with her little Child, prepare for a really happy Christmas.

Then, over to the wards troop the choir boys to sing the story of "Oh, Little Town of Bethlehem," to the small folk. Some of them are sitting up in bed, in their little red jackets, their eyes bright with anticipation, silent with the wonder of the music. Tired little faces smile, and eager voices ask to be "moved nearer, where we can see." Polish Peter, whose heart can never last till another Christmas, calls out huskily, "Goodbye, kids!" In the girl's orthopedic ward, Frances, for whom also this Christmas is the last, lies in a little room by herself, with her very own Christmas tree, and softly hums with the boys, "Once in David's Royal City."

After midnight in the quiet of long rows of sleeping children, when the little crutches have been hung on beds, and the fear of pain, of plasters and pulleys, and of ether have been forgot-

ten, the night nurses hang up the stockings. This is the time, when the probationer, spending her first Christmas far from home, feels in her heart the blessedness of working with the children.

Nowhere, in any hospital, in any land, I am sure, can children with tubercular joints, rickets and infantile paralysis, pneumonia and heart trouble, surpass our children in lung power on Christmas morning.

Such shouting and laughing and calling back and forth as reaches the ears of the nurses on their way to Christmas service in the hospital chapel early in the morning.

What wild enthusiasm when Santa Claus himself, the pack on his back fairly bursting with toys, comes around through the wards in the middle of the morning in order to give, himself, with his own hands, the toys he especially saved for little children in the hospital! Surely the young house officer, grinning under his hot mask and heavy pack, will never forget the happy faces raised confidently to his. Every boy gets a drum and beats it, or a horn and blows it, while shy little girls reach for dolls, dishes, and books, and Santa prances, now here, now there, and shakes his fat "tummy" to the wild delight of all. He reminds the awe-struck Tommy of the day he was naughty, and congratulates him on his recent good behavior. Secure in his role, he most realistically gives orders to the dignified head surgeon who has strayed in, to hustle up his reindeer, as he must fly on to the children in the next ward. He departs amid a chorus of hilarious good-byes, and leaves behind him the happiest children in Boston.

After the children's dinner, the nurses who live too far away to get home or to friends, have a real Christmas dinner all together, with their dining room trimmed with green and small glittering Christmas trees. They have gay little place-cards and favors, and, for the while, live only for a right good time.

Out at the Convalescent Home in Wellesley, the children have had the same wonderful stockings, and, after breakfast, an enormous Christmas tree. The ladies who support the Home have played Santa Claus with loving hands, and the play-room rings with happy laughter and the joyous chatter of happy youngsters.

The out-patient children have been cared for by the social service department. Friends of the Hospital loan their motors and help in the distribution of great packages of toys and fruit and candy, the day before Christmas.

Christmas night finds Abie sleeping soundly with his drum tied to his bed, confident in the promise of the night nurse to guard his "udder tings." Peter lies back on his pillow with his toys piled high on the table beside him. Thin little cheeks are pressed to blue-eyed dollies. Billy has discovered that it isn't half bad to have one's leg swung up under a crane, for the night nurse has agreed, for this one night, that the tent made by the bed clothes is a "corking place to keep my boat." Even George Washington Jones, Jr., stops yelling long enough to wonder at the strange tinkle something made when he struck out his little black fist.

The happiness of these little hearts brought Christmas peace and joy and comfort to us all.

Christmas night finds Abie sleeping soundly, with his drum tied to his bed, confident in the promise of the night nurse to guard his "udder tings."

HOW CAMBRIDGE CITY HOSPITAL OVERCAME FINANCIAL HANDICAP

Original Building Plan Upset by Shortage of Funds—Trustees Solve Question of Cramped Finances by Constructing Building to Provide for Future Development—How the Plan Has Worked Out

By JOSEPH J. WEBER, Managing Editor, The Modern Hospital

AFTER considering the pros and cons of the situation for several years, the city of Cambridge decided in 1915 to erect a 250-bed hospital. A site was selected on Cambridge street, about five minutes' walk from Harvard University, plans were carefully prepared, and bids were secured.

When the bids were opened it was found that it would cost a great deal more money to build the institution as planned than had been estimated—in fact, more than the city had appropriated. The trustees, therefore, very wisely decided to use such funds as were available in the construction of two buildings—a central administration building and a service building large enough to meet the needs of a fully-developed 250-bed hospital—and to adapt the main building, temporarily, to the housing and care of fifty patients.

The temptation of hospital trustees with a limited amount of money on hand to build only for the immediate present and to disregard more or less inevitable future developments, is sufficiently prevalent and often enough yielded to, to make it worth while to describe briefly how the Cambridge City Hospital reached a solution of the problem. This can best be done, perhaps, by comparing the plans of the present structure with the original plans of the fully-developed 250-bed hospital so far as they relate to the existing structural area.

The six floor plans reproduced herewith have been arranged in three groups, each showing the plan of one floor as originally drawn for the proposed 250-bed hospital, in comparison with the existing arrangement of the same floor in the present building.

Passing through the front door of the hospital, one enters directly into the general waiting room —an oblong room thirty by sixty feet with half-circle ends and its long axis running parallel to the front of the building. To the right and the left of this general waiting room, and directly entered from it, are the admitting and the superintendent's offices. These are the only rooms that lie south of the main corridor on the ground floor and remain unchanged in the modified plans, as may be seen from a glance at the floor plans.

Back of the main corridor in this section of the building as originally planned, are the pharmacy (now used as a two-bed room), the nurses' locker room (now used as a linen room), the doctor's dining room (now used as the nurses' dining room), the nurses' dining room (now used as a 14-bed male ward), the library and trustees' room (now used as a two-bed male ward), and the doctors' locker and wash-up room.

On the second floor, the entire section of the present building lying north of the main corridor will be devoted to the operating suite and is so used now, with the exception of the two recovery rooms, one of which is a two-bed ward. The space to the left of the elevator, originally planned for bath and linen rooms, constitutes the serving room for this floor.

The operating rooms, of which there are two, are each fifteen by twenty feet and have a central sterilizing room ten by thirteen feet, entered from a common vestibule. Connected with each operating room is an etherizing room, which is so located that it can be entered directly both from the corridor of the operating suite and from the operating room itself.

The wards on this floor, all of which lie to the front of the building, are separated from the operating suite by the main corridor. They were originally planned for children's medical and surgical cases, but are at present used wholly for adult surgical cases, both male and female. The three wards have a capacity of fourteen beds. There are bath rooms connected with each of the two larger wards.

In the comprehensive plans, the third floor, which does not extend completely over the section of the second floor occupied by the operating suite, provides rooms for eight interns and doctors in addition to a living room and necessary toilet facilities. At present these rooms are occupied by the maternity and children's departments of the hospital. The housekeeper and house-officer also have rooms on this floor. This arrangement is far from satisfactory and the space is inadequate, but it enables the hospital to meet a real need temporarily until larger quarters can be provided.

The basement houses the kitchen, bakery, refrigerating rooms, x-ray equipment, fan room, and a small accident room.

The service building, constructed to meet the hospital's ultimate needs, is connected by a tunnel with the main building. This contains, besides the boiler and pump rooms, the pathological laboratory, morgue and autopsy room on the first floor, and a fully-equipped laundry, with ample floor space for expansion, on the second and top floors. Seldom does one see a laundry so well housed, so thoroughly equipped, and so efficiently arranged as this one.

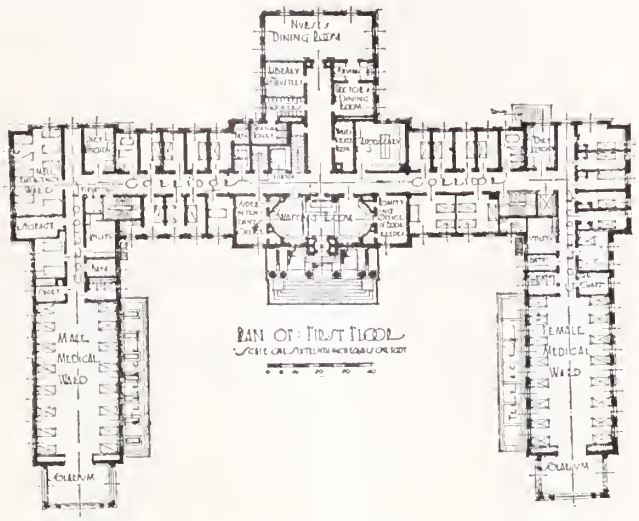


Fig. 1. Original plan, first floor: to the left and right of the general waiting room are the admitting and the superintendent's offices. These are the only rooms that lie south of the main corridor on the ground floor and remain unchanged in the modified plans.

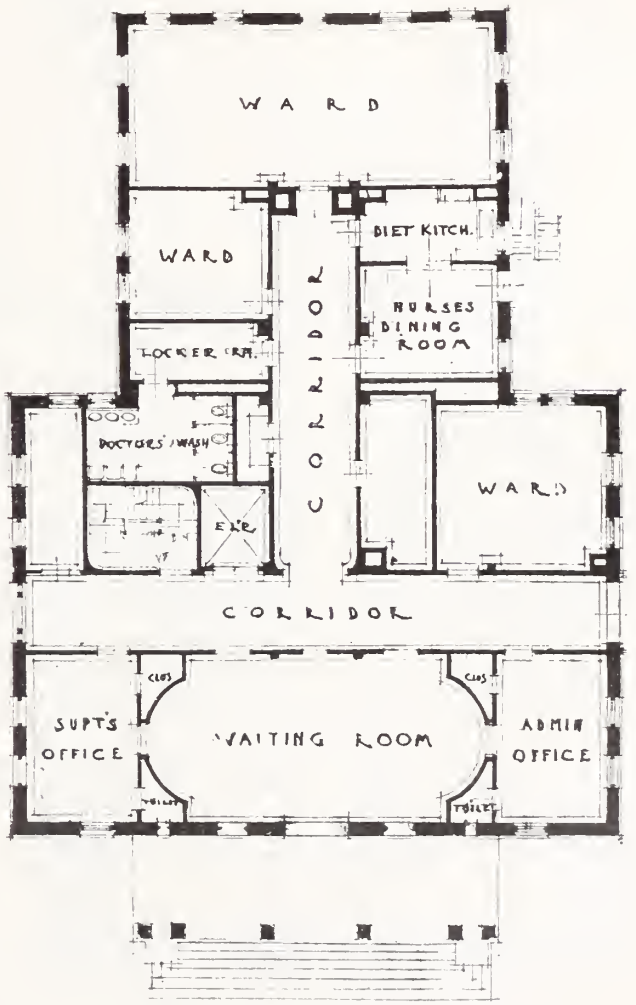
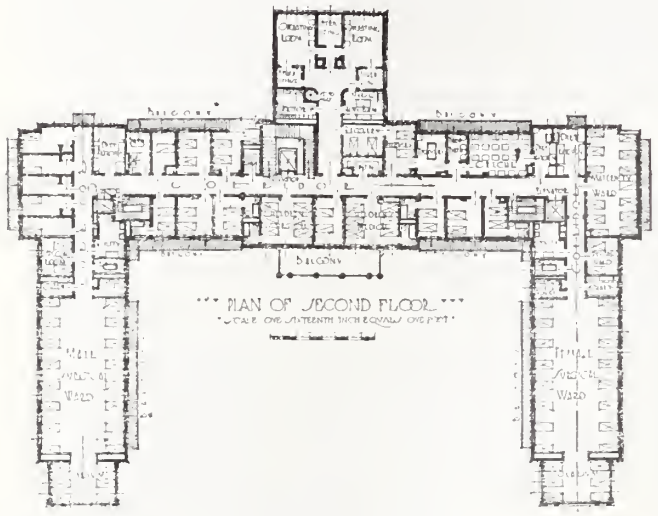
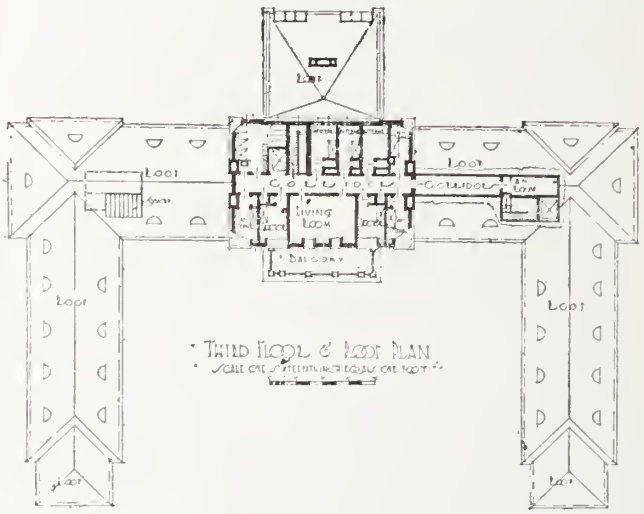


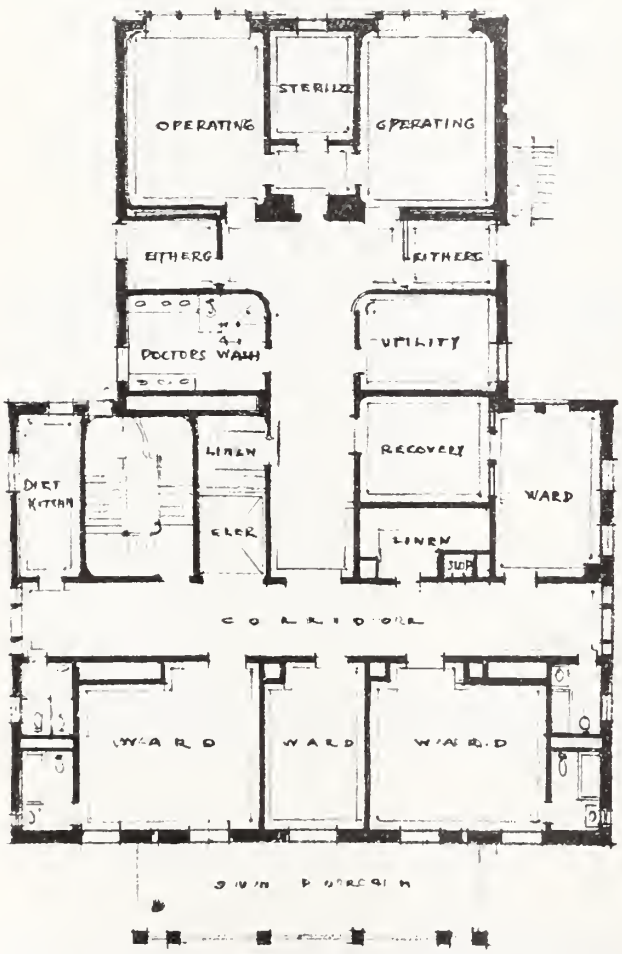
Fig. 2. Present Plan—first floor: back of the main corridor, as originally planned, are the pharmacy (now used as a two-bed room), the nurses' locker room (now used as a linen room), the doctors' dining room (now used as the nurses' dining room), the nurses' dining room (now used as a 14-bed male ward), the library and trustees' room (now used as a two-bed male ward), and the doctors' locker and wash-up room.

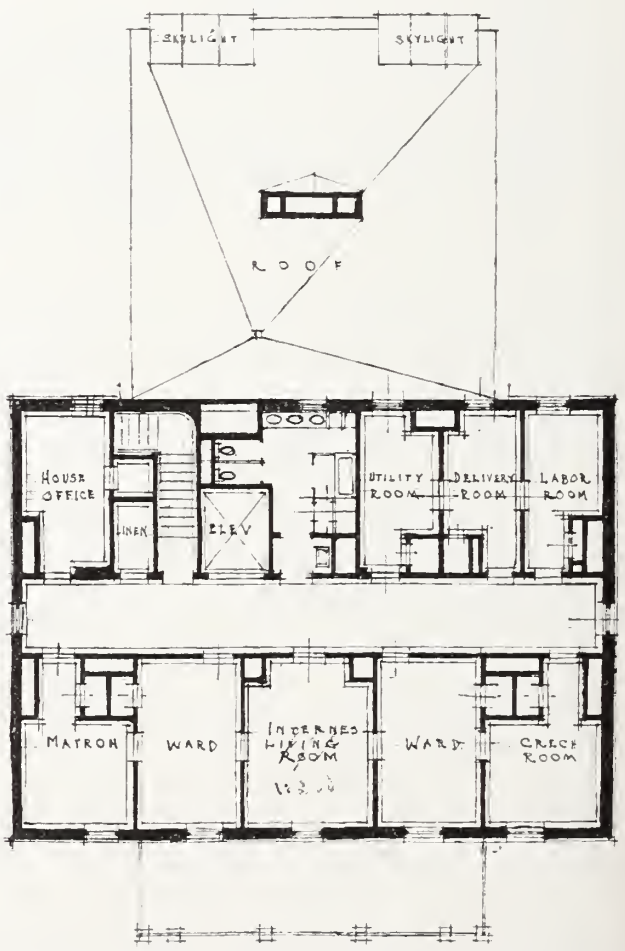
The Massachusetts state legislature several months ago passed an Act granting the city of Cambridge permission to issue bonds in the amount of $150,000 beyond its present debt limit for the erection of additional wings. These wings when constructed will enable the hospital to provide an adequate, well-equipped out-patient department, an additional one hundred twenty-five beds, including a greatly needed surgical ward and private rooms for both medical and surgical cases. The board of trustees early last summer received notice that its request had been granted by the city council, and work on the new structure is now going forward.





Figs. 3 and 4. Original plans for second and third floors: The second floor wards were planned for children's medical and surgical cases. The third floor, in addition to living room and toilet facilities, has rooms for eight interns and doctors.





Figs. 5 and 6. Present plan of second and third floors: The section north of the main corridor on the second floor will be devoted to the operating suite and is so used now, with the exception of two recovery rooms one of which is a ward. The wards planned for children are at present used wholly for adult surgical cases. The rooms on the third floor originally planned for interns and doctors, are occupied at present by the maternity and children's departments. The housekeeper and house officer also have rooms on this floor. Although this arrangement is far from satisfactory, it enables the hospital to meet a real need until larger quarters can be provided.

SOME SMALL COMMUNITIES AND WHAT THEIR HOSPITALS MEAN TO THEM

II. A Great Lakes Port With a History and a Future—A Hospital Which Has United the Local Medical Profession and Raised Standards of Medical Practice—An Exceptional Opportunity for a Progressive Community

By MARY KATHERINE CHAPIN, Contributing Editor, The Modern Hospital, Chicago

THE main business street of the city of Mattocquan follows the shore of lovely Lake Mattocquan as closely as it dares. It is constantly thrust back by foundries, factories, lumber yards, coal sheds, and other evidences of progress, which sprawl broadside to the water, effectually blocking most of the view. A short navigable channel opening into one of the Great Lakes on the west, makes Lake Mattocquan a splendid land-locked harbor, five or six miles long and from a mile to two miles wide. The cheap shipping facilities thus furnished the city to the great markets just beyond in part account for the long roll of local industries. I dare not reproduce it here; it runs from electric cranes to pianos, from tanneries to cement works, and includes three or four plants said to be the largest of their respective kinds in the world.

How is it possible for a city which was estimated by the Federal census to contain less than twenty-eight thousand inhabitants in July, 1917 (it is really much larger today; the local estimate is forty thousand), to supply hands enough to keep all these wheels turning? As a matter of fact, Mattocquan manufacturers are tearing their hair because they could double their output if they could get more employees. Although in 1916 it was ninth in population among the cities of the state of Wisconois, Mattocquan is said to be second in the amount paid out in wages. It is also an important shipping port for the great Wisconois fruit belt.

However, I am not writing publicity literature for Mattocquan's enterprising chamber of commerce; I am merely trying to make it clear that no lack of recognition of its metropolitan aspirations led to its inclusion in this series. Far be it from me to intimate that Mattocquan, after all, is merely an overgrown country village. I can say, however, without disrespect to Mattocquan, that a considerable rural population depends on the city for hospital facilities. I might add that the inhabitants of the city itself have not learned to deprive themselves of light and air. There are few or no apartment houses and very few residences that are not surrounded by open grass plots on all sides. The tree-embowered streets are glorious to behold in October.

Because the very interesting industrial history of the region is closely connected both with the movement of population and with its hospital history, I want to recount it briefly here. Back in the eighteen hundreds, the pine forests were the sole source—and a bountiful source—of wealth to this region. From the opening up of navigation in the spring until its close in the fall, Mattocquan's forty-two saw mills were busy making and shipping lumber. During winter, Mattocquan was dead; some of the laborers drifted off to the northern logging camps, and the others hibernated until spring.

Gradually, however, the mills ate up the forests and then began to starve. (The beautiful oaks and other deciduous trees of the region today are despised by the old lumber men as "second-growth scrub," not worth cutting.) One by one, and then by threes and fours, the mills closed, until about twenty years ago not one was left. Most of the new-made lumber Croesuses took their millions to Great Falls or California or Bar Harbor to spend. The place was dead then from one year's end to the other.

A faithful few still clung to Mattocquan. Some of these sought to bring the place back to life by offering bonuses to manufacturers for settling there. The plan succeeded. Today not a board is milled in Mattocquan, but copper and iron from the north, raw cotton from the south, lumber from California, and I know not what other substances from what other quarters of the country or the globe are shipped in as raw materials and out as motor parts, knitted underwear, furniture, and a hundred other finished products.

Even back in the old lumbering days, the population was not all of English descent. Many French Canadians came down from the northern border to work in the camps and the mills; these mostly drifted back when the lumber industry ceased to exist, but names on business signs and in the directory testify that the French are still a living element in the population. The Dutch, or, as they prefer to call themselves, Hollanders, began coming in the old days, and, I am told, still continue to come. They stay; the map of this part of the state is dotted with Dutch settlements, and Dutch names figure largely in the city direc-

[1] As indicated in the foreword of this series of articles which began in the November issue, all proper names, whether of towns, counties, states, hospitals, or other institutions, are fictitious, since the purpose of the articles is not to pass judgment on individual communities and institutions, but so to present the facts that other communities may draw from these facts any lessons that may be useful to them.

tory. With the opening of the new industrial era in Mattocquan began an influx of Swedes, Germans, Poles, Hungarians, Greeks, Italians, and people of well-nigh every nationality under the sun; the city's population is now as diversified as its industries. Twenty nationalities are represented among one year's patients in one local hospital. The various nationalities tend to flock by themselves. There are at least four foreign-language churches and as many separatist schools. The melting-pot will have to simmer for some time before the metals fuse.

As I have indicated, the population of the city is probably something between the census bureau's estimate for July, 1917 (27,434), and the local estimate of 40,000; in fact, there would be no great risk in accepting the local estimate, because, even if it is a little excessive now, it will undoubtedly be made good before long. The census estimates the population of the remainder of Mattocquan County at 16,702; but this estimate was made when the industrial suburb of Mattocquan Heights, which now claims from 10,000 to 12,000, had but 1,690 inhabitants. There are no other towns of any considerable size in Mattocquan County. Great Falls, the nearest large city, which has 128,000 inhabitants, lies about thirty miles to the southeast; to the northward it would be necessary to go nearly fifty miles from Mattocquan before striking a city of 10,000 inhabitants. The two counties immediately to the north and northeast of Mattocquan County have probably not increased greatly in population since the last Federal estimate, which gave them each about 20,000 and no towns of more than 2,000.

The death rate per thousand for all causes in the city of Mattocquan was, according to the Federal vital statistics for 1916, 18.5. This is higher than the average (15 per thousand) for cities in the registration area for the same year, and also high, though not the highest, among the death rates of cities in the state of Wisconois for the year 1916. The death rate in the rural part of Mattocquan County for the same year was 15.9, which is higher than the death rate for the rural part of the registration area (12.9), and also rather high among the death rates of the counties of the state. The death rates of the two counties to the north were 10.9 and 11.8 per thousand, respectively.

The county physician and health officer of Mattocquan County is a general practitioner who takes his duties very seriously, considering that he is a part-time man. The city health officer and physician, likewise a part-time man, has shown considerable initiative; he has introduced inspection of the city's milk supplies, and is one of the prime movers for the organization of an efficient health department with a whole-time health officer at the head. It is hoped to effect this change with the inauguration of the commission form of government, which will take place the first of next year. The present school board employs two school nurses. The state anti-tuberculosis association employs a local tuberculosis nurse, and at intervals holds clinics. A visiting nurse organization employs one visiting nurse for work among the poor. Several industrial concerns of the city have first-aid departments, each in charge of a nurse, and one has a physician who makes daily visits. There are, according to the American Medical Directory, about sixty physicians in Mattocquan County, and sixteen and eight, respectively, in the two counties to the north.

In the general region described, Mattocquan has the only hospitals for about ten miles south, forty miles north, twenty miles northeast, and forty miles southeast (the Great Lake forms the western boundary), and at three of these points there is only a hospital of a few beds, without diagnostic facilities and without a training school. The fourth point, that to the southeast, is the city of Great Falls, previously mentioned, where are situated several hospitals of a hundred beds and over.

There are three hospitals in Mattocquan. Considering the smallest hospital first, there is Greenfield Tuberculosis Hospital, which belongs to the city, but also receives county cases. It has only nine beds, is without diagnostic facilities, and is under the administrative charge of the supervisor of the poor and the medical care of the city physician. A resident practical nurse is housekeeper and sole attendant. It is regarded frankly as a makeshift, but, from the point of view of a makeshift, is apparently doing good work in furnishing clean quarters, fresh air, nourishing food, conscientious attendance, and medical care to patients who otherwise would get none of these aids to recovery. It should be noted in this connection that the local hospital is not the only possible hope for the tuberculous poor, for such patients have the right to apply for admission to the state sanitarium for tuberculosis, which, I am told, is an excellent institution. It has, however, less than two hundred beds and a long waiting list. Besides, it is about a hundred miles away from Mattocquan.

Although St. Mary's Hospital is poorly housed at present, it has in course of construction a new, large, stone edifice, in the center of a beautiful lot comprising a city block. Even though the old building is unattractive, the service rendered is

in keeping with the reputation the Sisters of Mercy have established the world over for efficiency in hospital management. The forms used for history taking are those recommended by the American College of Surgeons, and every step in the advancement of hospital service is being eagerly seized and added to the rules and routine of the hospital.

The training school has twenty pupil nurses, according to the Sister. The capacity of the new building is to be 150 beds.

The present capacity of Barham hospital is 100 beds, 18 in private rooms, 12 in semi-private, and the rest in wards. Additional buildings are contemplated which will increase the total capacity to 150 beds. The ward rates are $14 a week; the semi-private rooms cost $16 a week; the private rooms run from $25 to $35 a week. There are 14 beds in the obstetrical department and 12 in the children's. The medical and surgical patients are not separated. The pathologic and roentgenologic department, in charge of a young woman physician with special training for this work, is one of the features in which Barham Hospital takes particular pride, for diagnostic work which used to be sent by local physicians to Great Falls is now done at home. Before the war Barham Hospital always had an intern; it has none now. The superintendent is a trained nurse. The administrative staff includes a dietitian-housekeeper. The training school of forty pupils is housed in a pleasant nurses' home. Both Barham and St. Mary's have isolation wards.

Out of 1764 patients cared for in Barham Hospital last year, about one-fourth came from outside of Mattocquan County, some from twenty or thirty miles away, up in the northern counties. Over 800 patients were operated on, and about 1100 operations performed.

In order to indicate the place of Barham Hospital in the community, however, I shall have to go back into history once more. One lumber millionaire who did not forsake Mattocquan when the lumbering days came to a close was James Barham. He put money, faith, and effort into Mattocquan's future, and he lived to reap the reward. Much of his great fortune he spent before he died on the town where he had made it. James Barham's features in marble, bronze, and paint greet one at every turn; so does his name. Here is Barham Park, a city square neatly pinned down with a marble shaft in the middle and a bronze statesman at each of the four corners; there is Barham Library, which asks no odds of Mr. Carnegie; yonder are Barham High school, Barham Art Gallery, Barham Gymnasium, and Barham Manual Training School. Four million dollars in all is said to represent the sum of Barham's expenditures on the city; but the gem of all his gifts is probably Barham Hospital.

He chose a beautiful parklike site, four city squares in extent. If any facility is lacking which could contribute to the perfection of service in a hospital of this size, it is because James Barham had not heard of it. Expense literally was not considered. Thus, the hospital is supplied with its own electric plant, and, lest a breakdown should occur, two sets of dynamos were installed. They work alternate weeks, and, while one is working, the engineer is overhauling the other to make sure that it is in perfect order. A similar arrangement prevails with regard to the duplicate automatic stokers of the furnaces. In some cases, liberality of equipment outran the needs of the institution; thus, costly hydrotherapeutic apparatus remains unused. The endowment was so liberal that the savings out of the interest have sufficed for the erection of a very attractive nurses' home. Altogether, it is a institution in which it is easy to do good work, because every essential is generously supplied, yet a very expensive one to operate, because expense was not a consideration when it was planned.

James Barham intended the institution to be a benefit to the community, but, fearing it might become the prey of politics, he did not give it to the municipality. Instead, he placed it under the charge of the local church to which his family belonged, to be administered, however, not as a church hospital, but in trust for the community. The trustees of the church appoint the trustees of the hospital, not necessarily from among the members of their own congregation, but from among leading citizens closely and permanently identified with the community. The policy of reappointing efficient members has been followed, and the result is an unusually representative, interested, and well informed board.

On the side of medical organization, the hospital was originally open to "any reputable physician" of the community, which meant some men of high professional and personal character, and others of not quite so high a grade. It had a nominal staff, and was nominally divided into services, but, as the chief of staff and the heads of the various departments served in rotation, little interest in or responsibility for the character of the medical and surgical work done in the institution was taken by the staff. There was no unity in the medical organization, for the distrust and jealousy not unusual among the physicians of a small community prevailed here.

A few years ago, the superintendent was disquieted by certain indications regarding the character of the work done by a few men who had the privileges of the hospital. She sought counsel of the staff men of highest standing, and they laid the problem before the board of trustees. All recognized the gravity of the situation and the necessity of taking measures to protect the safety of patients and the good repute of the hospital. The familiarity of some of the staff members with the plans of the American College of Surgeons enabled them to give advice for the formulation of rules, particularly with regard to histories and the care of major operative cases. After careful deliberation the board adopted the following rules, and placed on the superintendent the responsibility of enforcing them:

1. A consulting staff of eight members, including three surgeons, three internists, one obstetrician, and one eye, ear, nose, and throat specialist, shall be appointed by the trustees.

2. A complete case history of each case entering the hospital must be taken within forty-eight hours of entrance. These histories must conform to the requirements demanded by hospitals of the first class. The responsibility for the history must rest upon the attending physician, who may call an intern to his aid when such services may be had.

3. Cases for major operations, except *bona fide* emergency cases, must be in the hospital at least twenty-four hours before operation. Each case must be subject to such study as shall make reasonably certain the need for operation. Before any major operation is performed there must be consultation with one of the members of the consulting staff.

4. If, in the judgment of the superintendent, the gravity of any case is such as to require additional advice, she may ask the attending physician to call in consultation a member of the consulting staff.

5. No manipulation of any character shall be undertaken upon the pregnant uterus, except the pregnancy be at full term, without the advice and consent of two members of the consulting staff.

In suspended animation of the new-born child, every scientific means for its revival shall be exhausted through prolonged effort.

6. Physicians and surgeons bringing patients to the hospital shall give such patients immediate, continuous, and proper care.

7. Non-resident physicians and surgeons of good repute and accredited skill may have the privileges of the hospital by consent of the superintendent, on recommendation of the chief of staff, governed by the same rules that apply to members of the staff.

8. Future admissions to the staff may be recommended by the chief of staff and the heads of departments, but no such recommendation shall be made until the candidate has proven beyond doubt his moral and scientific fitness for such place.

9. Breaches of the foregoing rules shall be called to the attention of the offending staff member by the superintendent. Failure to comply with the rules after a second notification shall subject the offender to six months' suspension from the staff and from all privileges of the hospital. Further failure shall subject him to dismissal.

At the same time, it was decided to build up the various services by retaining at the head of each the man who was most interested in that specialty. Each man was to hold this position as long as he remained active in the work of his service, and each was to be *ex officio* the consultant for that department. The number of services was increased; there are now ten: medicine (allopathy), medicine (homeopathy), surgery, obstetrics, eye, ear, nose, and throat, gynecology, pediatrics, orthopedics, urology, proctology, pathology and roentgenology. The office of chief of staff was likewise made permanent and conferred on the man who had shown the deepest interest in the welfare of the hospital.

These changes had from the first the loyal support of three or four members of the staff. Among the remainder there was for a time considerable opposition and some ill feeling. The board, however, stood firm and the superintendent enforced the rules without fear or favor, beginning with the biggest men on the staff. One of the men who had supported the reform told me that he was one of the first to be called on the carpet for failing to write up a history, "and a darn good thing it was, too." It did not actually become necessary to suspend any staff member for disregard of rules, and no one whose practice the hospital cared to keep took it from Barham, for, after all, the physicians needed the hospital more than the hospital needed the physicians.

After a few months, it was suggested that staff meetings would be a good thing. Because the noon hour was the most convenient period, and also because a comfortable meal turneth away wrath and doeth good like a medicine, it was decided to get the chief of staff and the heads of services together for a weekly luncheon at the hospital, while the entire staff or as many as could attend would be drawn together once a month.

The staff meetings have now become a recognized feature of the institution. A staff member who has an interesting case (and it is surprising how many interesting cases there are, now that men are on the outlook for them) will bring it up for discussion. A doubtful case will be described and submitted to the company for diagnosis. Perhaps after luncheon the patient will be brought in and an informal clinic held. If one of the members of the staff has been away to attend a convention, to visit other hospitals, or to see the work of other physicians or surgeons, he is expected on his return to report the interesting things he has seen. Thus the staff meetings have become a constant educational force, acting to broaden the views and to raise the standards of the staff.

Meanwhile a very noteworthy thing has been

taking place. Much to their surprise, the malcontents found that no harm had been done to their practices, for the consultants, who were among the physicians of highest standing in the community, had been exceedingly scrupulous in their dealings with the cases in which they were called into consultation. Perhaps because of this and perhaps also because it is hard to hold suspicions and grudges against a bunch of decent fellows with whom one periodically breaks bread, the relations of the physicians of the community have improved to a marked degree. The staff of Barham Hospital includes thirty physicians, very nearly every doctor of standing in the community, and the harmony as well as the efficiency of the organization is a matter of satisfaction and pride to all. One of the staff members told me that he had been among the opponents of the new plan because he had not had confidence in the motives of its advocates, but that he would not now go back to the old *regime* for any consideration. "Before," said he, "every doctor was so much afraid that some other doctor would kidnap his patients that he would no more call a consultant than he would expose his patient to smallpox. Now it's a rare thing that a patient leaves the hospital without having been seen by some one besides his attending physician; the patient is likely to feel neglected otherwise. And it doubles our efficiency."

Barham Hospital has done splendid constructive work in unifying the medical profession of the community and in raising the standards of local medical practice; to my mind the workings of its staff are better worth seeing than its beautiful buildings or excellent equipment. I wish that every community which believes that physicians in a small place "can't" lay aside personal jealousies and work in harmony for the attainment of high standards would send a delegation to see how the impossible has been achieved in Mattocquan. The example would surely arouse a desire to go and do likewise.

St. Mary's Hospital is the older of the two hospitals. Both, however, accept all classes of cases, yet oftentimes Protestants prefer St. Mary's and many times Catholics desire Barham. Although Barham at present has greater facilities for service, there really can be no choice in the character of the service rendered, as both are of a high order. With the opening of the new St. Mary's, in 1920, and the converting of the old hospital into a nurses' home, few cities of the size of Mattocquam can boast of more up-to-date hospitals.

Quantitatively, how is the community being served? Everyone with whom I talked seemed convinced that the demands for hospital service were being met, except, indeed, so far as private rooms are concerned; there, demand outruns supply. It is often necessary to put "really nice people" who would gladly pay for rooms into wards. No question was raised as to whether or not the demand is an adequate measure of the need.

Some questions, nevertheless, arise. If the demand comes from the few who can pay for private rooms rather than from the many who cannot, may not this be because the well-to-do have learned to demand what they need and the less favored portion of the community has not? Is it really likely that people with comfortable homes need hospital care more urgently than the growing, crowded, and badly housed working population? Is it even certain that this community, which has a large foreign population and a high death rate, has a number of hospital beds adequate to its needs as distinguished from its demands?

Doctor Hornsby, during his editorship of this magazine, wrote in answer to a correspondent,[1] "We have become accustomed to figure in this country that a hospital bed is needed for every 150 of the population . . . and we believe it to be a conservative rather than an exaggerated estimate." Probably no authoritative finality can be claimed for this ratio; it is very doubtful if our knowledge of the social relation of hospitals permits such a claim to be advanced for any ratio between hospital beds and population. The standing committee on hospitals of the State Charities Aid Association of New York found the actually existing ratio between hospital beds and population in the smaller cities of the state to be one bed to each 300 inhabitants in 1912. The reports received by the committee also showed the need of additional hospital facilities. Meager as the data are for estimating a normal ratio, it might seem that the burden of proof rests on a community with unsatisfactory health conditions to show that its hospital provision is adequate if the proportion of beds is as low as one to 300 inhabitants or lower.

Now, Mattocquan, Mattocquan Heights, and Mattocquan County together claim a population of not less than 60,000. Barham Hospital's 100 beds and St. Mary's 50 together give a ratio of only one bed to every 400 population; and this takes no account of the northern counties, in which probably half the population—say 20,000 inhabitants—depend on Mattocquan for all their hospital facilities. Taking the whole 80,000, the ratio is one bed to every 533 inhabitants. Even when Barham Hospital and St. Mary's have enlarged, according to their respective plans, to 150 beds each, the ratio of general hospital beds to

[1] The Modern Hospital, March, 1916, p. 218.

population will be only one to every 200, taking the population merely of Mattocquan, Mattocquan Heights, and Mattocquan County into consideration, and one to every 266, including the outlying counties.[2]

In this connection the ratio of physicians to population is of interest. According to the American Medical Association's figures for 1919, the average ratio for the United States is one to every 720 inhabitants. The average for the state of Wisconois is somewhat higher—one to every 681. For this part of the state, however, it is much lower. In Mattocquan County it is about one to every 1,000, and in the two northern counties it is about one to 1,250 and one to 2,500, respectively. Where the supply of physicians is so inadequate, hospitals should be an important factor in enabling the local medical profession to meet the needs of the population by gathering as many of the sick as possible together where they may be cared for without such great waste of the attending physician's time.

As usual in a small community, the two general hospitals seem to be regarded as competitors. There is, so far as I could see, none of the enmity and bitterness which sometimes exists between local hospitals, but there is certainly no cooperation. It might seem that the community has work enough for both hospitals to do, but, of course, there is room for competition if each seeks to monopolize the profitable patronage of the well-to-do. What will be the outcome of such rivalry? Will each institution, like a hotel, bid for trade regardless of the actual needs of the community? Will costly equipment be duplicated and high-salaried employees multiplied until the cost of good hospital service reaches a maximum limit in both institutions? Or will one hospital, by virtue of its wealth and reputation, attract patients who can pay for the standards of service it maintains, while the other lowers standards as much as it dares, making its bid for patronage on the score of cheapness? And, meanwhile, what will be the fate of that part of the community which makes no demand for hospital care, both because it cannot afford the price and because it has not learned the value?

If anyone knows the answer to these questions, that one is not I; but here is what I do believe and also what I venture to wish.

I believe that Mattocquan has a splendid and exceptional opportunity to build up on a foundation of solid knowledge a well-considered and consistent health and hospital program which utilizes each and every available agency, public and private. An exceptional opportunity, because probably few cities emerge from the village stage into the metropolitan phase of existence with the advantages of a united and progressive medical profession, a comparatively simple hospital situation, and the prospect of an active and efficient health department.

I wish that the new health department, the medical profession, and the hospitals of Mattocquan would join hands in an effort to find out, through a careful social and sanitary survey,[3] just what the city's needs are, both for the prevention and for the cure of disease. Perhaps the state university hospital, which has plans for helping to upbuild local hospital standards, would lend its aid.

What is the incidence of disease in the community? What is the proportion of preventable disease? What proportion of the cases of sickness cared for at home have an environment favorable to recovery?[4] Of those cases of sickness that fail to receive hospital care though it would improve the chances of recovery, how many are deprived of it through ignorance of its benefits, how many through prejudice, and how many through inability to pay ward rates? Of those too poor to pay $2 a day, how many could pay something? How is the incidence of serious sickness distributed among the social classes?

With the answers to these and other questions in hand, and taking into account both the present population and the probable rate of increase, Mattocquan would be in position to calculate, not only how many hospital beds were needed in all, but how many for each one of various classes of cases, and how many at each one of different rates. Then, if the two hospitals desired to do their mutual best for the community, and not merely to outdo each other, they would plan their future work after consultation with each other, with the city health department, and with any other agency which had good counsel to supply. In order to keep down the cost of hospital care to the community as far as possible, they would not duplicate expensive facilities unless careful and disinterested study of the case proved such duplication to be absolutely necessary for the maintenance of proper standards.

A program of cooperation instead of competition would enable the hospitals of Mattocquan to go before the public with authority when they need additional means. At present, although

2. I am not forgetting that the splendid hospital of the state university medical school is being enlarged to 2,000 beds, and that indigent patients from all over the state may be sent there for treatment. Two thousand beds for a state of three million population, however, gives a ratio of one bed to every 1,500 inhabitants, which will not appreciably relieve local congestion anywhere.

3. Such a survey might well have a social value beyond that of determining just how many hospital beds are needed and what preventive measures should be taken.

4. Housing conditions are admittedly bad in Mattocquan, and, while this is a remediable cause of disease, it is one which it will take time to rectify; so will the ignorance of hygiene among the foreign population.

there is much wealth in the city, it is said to be most difficult to get any of it for hospital purposes, because James Barham's munificence has spoiled the public. Barham Hospital is in the minds of many almost as much a petted beneficiary as a medium of benefaction. Therefore, though Barham would have much to give, it would also have much to gain by basing its future plans on a well-studied survey of the needs of the community—by proving that the welfare of Mattocquan rather than the aggrandizement of Barham Hospital was the mainspring of its actions.

Utopian and visionary, is it, to imagine such cooperation between hospitals? Perhaps; but is it more utopian than the vision of harmony among the physicians of a small community? I have seen the one dream realized; I look forward to seeing the fulfillment of the other.

A PUBLIC HOSPITAL PLANNED TO MINIMIZE DEPRECIATION

Abandonment of Agricultural Work at Boston State Hospital Will Necessitate Some Changes in Original Scheme—Standardization Idea Carried Out in Many Details, But Not at The Expense of Progress

By A. S. KENDALL, Kendall, Taylor & Co., Architects, Boston, Mass.

THE Boston State Hospital, which is in the Dorchester section of the city, is devoted to the care of the insane. It is nearer Boston than any other public institution of its kind and is well within the single fare zone on the street cars, thus being easily accessible to the friends and relatives of the patients. The number of visitors taking advantage of this fact on the days set apart for visitors amply justifies its location and furnishes a potent argument for its development. Few other institutions in the state are so favorably situated, and a visit means a tedious—and in these days an expensive—journey into the country for a person from Boston or vicinity. Ten cents and an hour's time will bring a visitor to the Boston State Hospital, and, if the efforts to reduce the H. C. of L. are successful, it may once again be five cents. In certain cases this proximity is doubtless not altogether an advantage, as visitors tend to make the unwilling patient more discontented and often stir up by false sympathy a yearning for liberty which cannot be realized. In the long run, however, the visitors are helpful. The patient is not entirely cut off, but feels that he still has a place among his friends, and is happy in the knowledge that he is not among the forgotten. The succeeding boards in control of institutions for the insane in Massachusetts, realizing its advantageous location, have sought for the past ten or twelve years to build up the hospital so as to take care of all the Boston cases in one institution and all within reach of their Boston relatives.

The psychopathic department is a part of the

Fig. 1. A grassy slope marks the approach to the reception building of the Boston State Hospital for the insane.

Old City Buildings *Nurses' Home—West Group* *"B" Building—West Group (Infirmary)*

Fig. 2. Panoramic view of the Boston State Hospital for the Insane. The wooded background affords a rural setting, but

Boston State Hospital and is located in Brookline under the same superintendent and board of trustees. It serves as a point of collection and study of especially interesting cases in the Metropolitan District, and as many as possible of its patients who have friends in the city are transferred to the Dorchester Department.

The nucleus of the Boston State Hospital was the old Boston Insane Hospital, purchased by the state in 1908. The buildings which figured in the purchase are those shown on plan No. 1. The hospital was in two groups, now identified under the name of the East Group and the West Group. The East Group was then used for women patients and the West Group for men. The sex division has since been largely, though not wholly, abandoned. The East Group is still used almost entirely for women, but both sexes are treated at the West Group.

The buildings in the old city asylum were largely of wooden construction of a rather picturesque type, with high-pitched shingle roofs and plastered exteriors. The large repair bills annually demonstrate the wisdom of a higher type of construction for permanent institutions. In passing, I might further remark that almost anything done in the building line at a public institution is likely to be permanent. Legislatures will grant appropriations for new buildings and often for repairs, but never for replacements. They argue that the building is useful, however bad. Repair it, renovate it, but never tear it down; it would be wasteful. Verily, but the waste began when it was built. One of the requirements in a public hospital building is that the depreciation shall be minimized. An earnest attempt to fulfill this requirement has been made in planning the additions to the Boston State Hospital.

As soon as the State Board of Insanity was well established in the possession of the hospital, steps were taken toward its development into a metropolitan institution. Dr. Owen Copp, then the executive officer of the state board and also acting as superintendent of the hospital, began with the trustees a study of the land available and the possibilities of the existing plant. Plan No. 2 is the result of this study. This plan was intended to show a possible development to a patient capacity of 5,000. It canvassed the possibilities of the land, and every building site then considered practical was put to use. Many of the buildings shown in outline were not given names, and their outlines were, of course, arbitrary as no definite purpose was in view at the time and considerable latitude was desired. In connection with this plan, certain of the buildings were definitely planned and shortly after built. These are the buildings shown on plan No. 3. Plan No. 2 was supposed to provide for a growth for twenty years. It has now been the guide of the trustees for ten, and in the main has been closely followed. Some departures have been made as different men took up the problem. There have been several radical changes in the controlling boards, but the persistence of this scheme of development has shown conclusively the value of such a plan as a permanent program.

I think that every growing hospital—and all hospitals grow if they continue to exist—should have such a plan of development. It is a constant source of inspiration and a spur to progress. These plans framed and hung conspicuously in the board room—or better, set under glass on the

"A" Building—West Group (Disturbed)

the institution is close enough to the metropolitan center to be easily accessible to the friends and relatives of the patients.

table in the trustees' room—will inevitably arouse curiosity, cause questions, and give opportunity for constructive discussion of the growth of the institution. Published in every annual report and given the widest possible publicity, they serve the same purpose in the community outside the hospital. Business organizations do this, and manufacturing plants make a point of it. Why not hospitals?

A development plan is drawn up for every new state institution in Massachusetts and also for the older institutions. I shall hope to have the opportunity of showing some of them here, in some future number. They have proved their value; some have even out-lived the vicissitudes of changing political control. Their appeal to a legislative committee is irresistible.

Referring again to plan No. 2: The proposed buildings were grouped on elevated land in a large circle around an area in the center. This central area is low and is bisected by an open brook which in springtime overflows a considerable part of the ground. The location was not considered especially practical for building purposes, and has been used as farm land. All of this district forty years ago was covered with farms, and farming has for years been a large part of the occupational industry of the institution.

The gradual abandonment of this agricultural work at the Boston State Hospital has now dictated a change in the development scheme and has made new plans imperative. The value of the land is high—too high for economical farming or for dairy use. The constant encroachment of the city is further increasing the value of the land and more strongly emphasizing the situation.

The failure to obtain an appropriation for new farm buildings some years ago convinced the trustees that this land must eventually be used for patients. The hospital has sold its herd of cattle, and will eventually do its farming in a separate colony located in a more favorable locality.

Plan No. 4 shows the results of a re-study under these changed conditions. This scheme was projected this year to guide the growth of the hospital for the ensuing period of ten years or more. Dr. George M. Kline, director of the Massachusetts Commission on Mental Diseases, Dr. James V. May, superintendent of the Boston State Hospital, and the architects have collaborated in the preparation of the scheme. It provides for an ultimate growth to a patient capacity of 5,600, and will utilize to this end nearly all the available land now owned by the state.

Before the low central area can be used for buildings, the brook will have to be covered in and the grade of the land raised to the level of Morton street. While this preparatory work is going on, the East and West Groups will be completed by the addition of the buildings shown on plan No. 4. These additions will consist of a large building for patients at the West Group, a reception building, a general administration unit, an assembly building, and a department for tuberculous patients in the southwest corner of the lot. Two new patients' buildings and a group administration building will practically complete the East Group.

The vital points of difference between plans No. 2 and No. 3 are: first, the abandonment of the farm with the development of the farm groups for patients and the use of the farm land for the new North and South Groups; and, sec-

ond, the change in the administrative center of the hospital. Owing to the encroachments of the two-family-dwelling type of housing, around the East Group particularly, and the preponderant development of the West Group, the geographical center of the hospital moves westward like the march of progress. Morton Street is quite as near the street cars as is Austin Street. The Boston Elevated holds a franchise on Morton Street, which may one day be used as it is becoming one of the main arteries of travel.

It is probably futile to attempt to figure on building costs in the future, but on the basis of to-day's prices the expense of the proposed development is figured as follows:

COST OF BUILDINGS FOR PATIENTS

Addition to East Group	$ 200,000
Addition to West Group	850,000
North Group	1,150,000
South Group	900,000
Buildings for Employees	420,000
Additions to Plant	757,000
Administration and Special Buildings	195,000
Total	$4,472,000

Expressed in terms of beds, this means $1,250 per bed, both patients and employees, which is, of course, a very low figure. Few of the buildings so far built, however, have reached a cost of $1,000 per bed. Were the cost to be double the figures given, it would compare rather favorably with the outlay required to establish a new institution for adult insane in anything like as favorable a location.

Turning from future plans to the buildings already constructed, a few words on the type and cost of the buildings which have been constructed since the state took control may be of interest. The following table gives the data as to the size and cost of the buildings for patients and attendants, in chronological order.

Date	Name	Class of Occupants	No. beds	Cost per bed	Cu. ft. per bed	Cost per cu. ft.
1910	Building B—West	Infirmary	300	$ 915.00	3,430	26.7
1912	Building G—West	Disturbed	120	875.00	3,880	22.5
1913	Building G—East	Reception Bldg.	48	1,080.00	4,200	26.0
1913	E and E West	Quiet Chronic	50	640.00	2,490	25.8
1913	Building H—West	Farm Cottage	50	620.00	2,620	23.7
1915	Building A—West	Disturbed	174	805.00	2,940	27.4
1916	Nurses Home—W	Women Nurses	80	875.00	2,300	36.4
1917	Building F—West	Infirmary	360	1,070.00	3,150	37.3
1919	Nurses Home—E	Women Nurses	90	890.00	2,400	37.0

The cost given is based on the total appropriation for the building which in Massachusetts includes the furnishing as well as the cost of construction. The costs have varied considerably, as must be expected, due to differences in the size, type of occupancy, and space provided per patient. The jump in building costs after 1914 is quite apparent in the cubic foot cost. The cost per bed has been kept down by economies in space per patient. All the patients' buildings except the small cottage "E" and "H" West Group are of brick and concrete construction with roofs of wood and slate. Under the wooden roofs fireproof ceilings provide an efficient fire stop in case of a fire in the wooden portion.

Fig. 3. The cottages at the Boston State Hospital are made attractive by the growth of trees, shrubbery, and vines.

The construction of these buildings has been standardized to a very considerable degree, as far as the exigencies of site and the needs of the various classes of patients will allow. The space requirements for patients in dormitories have been set at fifty square feet of floor area with an additional fifty square feet in day rooms. This allowance is increased when single rooms are required, with a decrease in day room space for such patients. The story heights are uniformly eleven feet which gives ten feet in the clear so that cubic space per patient corresponds with the floor

1909

1911

1919

Forecast

Fig. 4. Above, at left, plan of buildings purchased by the state as the nucleus of the Boston State Hospital in 1908; above, at right, plan of proposed development, showing possibilities of land and site as viewed by authorities in 1910; below, at left, plan of buildings constructed as a result of study shown in preceding figure; below, at right plan of proposed future development, as necessitated by change from agricultural pursuits and increasing value of land. This plan which was expected to provide for a growth for twenty years has been eminently satisfactory and has been closely adhered to for half that period in spite of radical changes in the controlling boards. Some change in the scheme is now necessary because of the abandonment of agricultural work. Plan No. 4 shows the changes made to meet new conditions. The new scheme contemplates the use of the farm, and all other available land now owned by the state and provision is made for a growth to a patient capacity of 5,600. This plan of development, as it has gradually been worked out, has proved a constant source of inspiration and a spur to progress. A similar development plan is drawn up for every new state institution in Massachusetts. If the plans are framed and hung conspicuously in the board room, or set under glass in the table in the trustees' room, they arouse curiosity and cause questions, and give opportunity for constructive criticism of the growth of the institution.

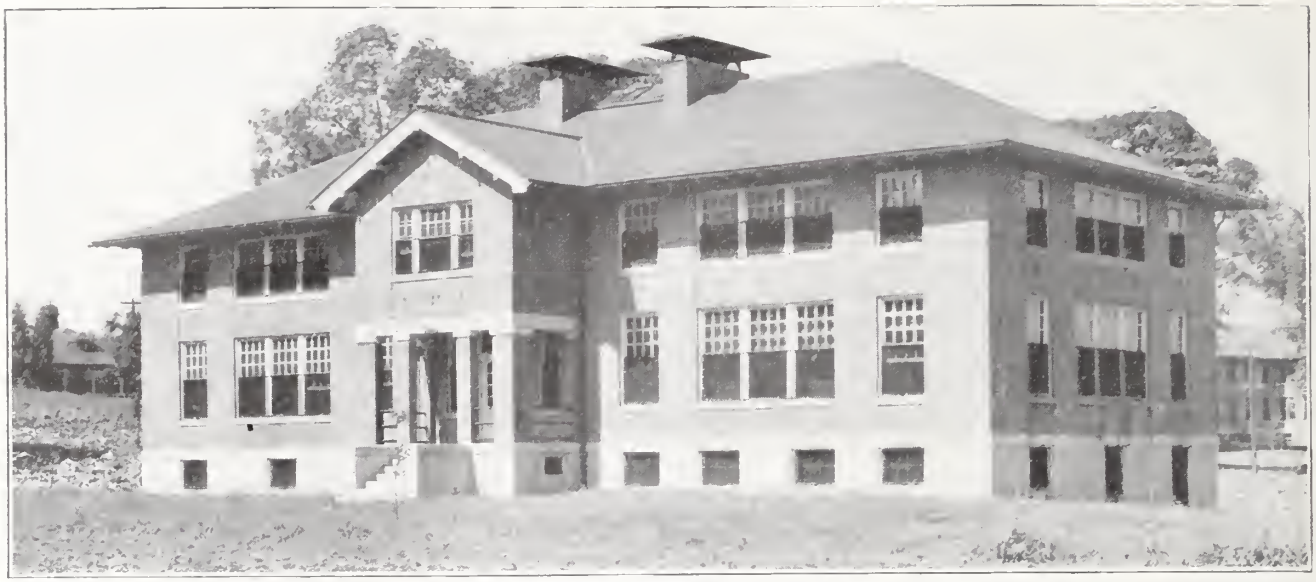


Fig. 5. One of the larger cottages in the West Group at the Boston State Hospital.

space. The requirements for corridors, toilets, and clothing and linen rooms are also standard after careful study and some experimentation. The buildings for patients who are confined have large open balconies which are much used. The balconies are covered in all cases and of course protected with grille work.

The exterior treatment of the buildings is uniform, but not to the extent of monotony. No attempt has ever been made to achieve architectural distinction or monumental display. A thing well-built and adapted to its purpose cannot fail to have the elements of beauty, the *desiderata* being always utility, low cost, and low maintenance.

The standardization idea has been carried out in many of the details of the buildings, both for patients and employees. The plumbing fixtures for patients and employees are all of the same pattern, chosen after exhaustive investigation. All valves and faucets are of one make, including fire hose, steam valves, reducing valves, temperature control, air valves, and hydrants. The hardware is standardized and even the size of the glass in the windows, so that it can be cut from stock sheet without waste, a rather important feature with the class of patients for which the institution cares. The floors generally are of battleship linoleum, with terrazzo floors in all water sections. Wood floors have been avoided since the first buildings were constructed, except in the nurses' homes, which have wooden interiors. The walls are of hard plaster with special cement dadoes in certain buildings requiring such treatment.

Oak and ash have been used throughout for finish, doors, and frames. All buildings are pro-

Fig. 6. The Nurses' Home, built in 1916 at the Boston State Hospital, accommodates 87 nurses.

vided with telephone and watch clock service, and those housing infirmary patients are provided with electric elevators. The hospital has its own electric power plant making alternating current to operate all lights and mechanical equipment.

No standard has been allowed to stand in the way of progress, and, when it seemed advisable, the existing standards have been changed or modified. As an instance, one or two experiments have been made in housing nurses and employees. A small third class building was constructed in 1913 for employees but it was not repeated, although the plan was to build several as needed. The type of building shown in the cut of the nurses' home has proved better and in the end cheaper, and this general type has been made the standard for all the institutions in the Commonwealth by the Commission on Mental Diseases. These buildings are built to house from fifty to 100 nurses as the requirements demand and cost from $800 to $900 per bed, built, furnished, and complete.

In 1912 the hospital operated four power plants; the next year the East Group plant was greatly enlarged, and steam is generated there for the whole institution and circulated through pipe lines extending completely around the site.

There are nearly two miles of conduit and piping. This system has made it easy to connect new buildings with the main lines as they are built and has proved very efficient. Recently while a repair was being made, the whole West Group was heated temporarily through the return loop alone.

A central store house, bakery and refrigerator plant was erected at the East Group in 1913 and will be added to in the near future. The laundry also is at the East Group and is so designed that additions can be made when needed.

This year plans are ready and the contracts have been let for two large kitchen and dining room units. These buildings, one at the East Group and one at the West, will replace the old kitchens and dining rooms which have been in use since 1908.

The West Group kitchen and dining room will eventually feed 1,500 in the common dining room and 1,000 infirm and violent patients in the buildings of the group. The East Group unit will serve about 1,500, of whom 800 are served in the dining rooms. The cost of building and equipping these two kitchen units will be about $210,000. Considerable study has been given to the problem, which is a most important one, and the outcome will be carefully checked up with the expectations. When the time comes to build similar units for the North and South Groups, we shall know our shortcomings and shall be able to correct them.

The plans and photographs of these kitchens will be published when the work is far enough advanced to photograph.

These buildings bring the history of the Boston State Hospital down to the present. Its growth has been steady and consistent, and in the future it bids fair to become one of the largest hospitals of its kind in the East.

Home Service Aids Returned Soldier

Many of our most progressive industrial plants today have their own social workers, who keep in touch with the families of employees and serve as friendly visitors as well as advisers and helpers in time of need. Both employers and employees in such plants realize the service which is performed by these social workers and would not feel that they were connected with a well-equipped establishment if these workers were lacking.

It is a similar function that the Red Cross Home Service is performing for the families of soldiers and which is now offered to civilians everywhere. The Red Cross visitor solved many problems for the mother and wife left behind when the man of the family went overseas, and now that the soldier has returned to civilian life he finds the Home Service section as indispensable to him as it was to his family. In addition to friendly visiting this important branch of Red Cross work includes an Information Service, which is proving invaluable. Any question which now troubles either soldier or civilian may be taken to the Red Cross. Of the 700,000 families with which the Home Service Sections of the Red Cross have been in touch since December, 1917, more than 80 per cent established their first contact with the organization by seeking information rather than financial aid.

The Red Cross will not interfere with any relief agency already existing, but rather aims to cooperate with it.

Dance Bridges Gap Between Present and Past

The dance frequently bridges the great gap between the present and the past that was before the war for some of the poor fellows at Uncle Sam's hospital at Fort Benjamin Harrison, Indiana. Most of the soldiers there are mental patients. Mr. P. L. Montani, Red Cross musical director, one day struck on his harp the note that brought memory back to a stolid Russian, which nothing before had been able to arouse.

"I would play upon the harp a varied selection of folk songs and national anthems," said Mr. Montani, "and I soon discovered that some responsive shaft struck home. One patient, a Russian, who could barely speak English, was particularly silent and morose. I played at him the Russian national anthem and several Russian folk songs. There was no response. But the moment I struck up a Russian dance the patient came to his feet. He began snapping his fingers. He began to smile. Then, crossing his arms, he performed a genuine Russian dance. This hugely delighted his mates, and the man rapidly improved."

After that team clog dances were inaugurated. Two or three benches were placed lengthwise, with orderlies holding them secure. The director would induce a man to give a fancy step on this improvised platform. This invariably aroused the men, and they were easily persuaded to sing, dance, and perform other stunts.

MANAGEMENT OF CONTAGIOUS DISEASE HOSPITALS*

Nurses' Technique in Sterilizing and Disinfecting Contaminated Articles—Methods Employed in Treatment of Instruments and Contents of Room—Fresh Air and Sunshine Play Important Part

By D. L. RICHARDSON, M.D., Superintendent, Providence City Hospital, Providence, R. I.

SOON after the Providence City Hospital was opened, we had printed copies of technique, one of which was given to each doctor and nurse and to other employees who come in contact with the patients. The hospital technique which follows is continued from the November issue, and is arranged as logically as possible:

Main sterilizer.—Mattresses, pillows, books, the underclothing of new patients, letters and other articles belonging to the patients which may be sterilized, are sent to the main sterilizer. Outside clothing is hung on hangers. Clothing to be

Fig. 1. A foot-valve controls the faucets of this wash bowl, which is provided with liquid soap and a basket for soiled towels.

sterilized is listed in duplicate, neatly folded, and pinned in a square cloth. The nurse then washes her hands, pins up the bundles in clean sheets, and drapes clean sheets about the clothing on hanger, each being marked with the name and ward.

The outside clothing is sunned and aired on the balcony, while the bundle of washable clothing is marked "Sterilize and return to ward." The bundles remain in the ward until the porter removes them to the sterilizing room. The amount of patients' clothing is limited as much as possible by leaving his own clothing at home and putting on hospital garments.

Mattresses and pillows are sent to the sterilizing room after cases which have been transferred or have died within ten days of the onset of the infectious disease, and always in the case of smallpox and typhus fever. Otherwise they are sunned and aired only. If necessary, mattresses and pillows may be carefully pinned up in sheets and left in the ward corridor until collected by the porter.

Utensil sterilizer.—Each ward is equipped with two large utensil sterilizers, the covers of which are operated by a foot lever. When the articles to be sterilized have been placed in the sterilizer, the nurse washes her hands (if they have been contaminated) and turns on the water and steam. Articles are left in the sterilizer *fifteen minutes* after "boiling" begins. They are then removed and washed. The following articles are so treated: All dishes used by patients; all utensils transferred from one unit to another; all utensils for mouth, nose, or ear; all bed pans and urinals. All bed pans and urinals are emptied and rinsed at the hopper before being placed in the sterilizer.

Instrument sterilizer.—Each operating room is equipped with an instrument sterilizer. Contaminated instruments are washed with tincture of green soap and water before being placed in the sterilizer. They are left in the sterilizer *fifteen minutes* after "boiling" begins. They are then removed, wiped perfectly dry, and put away in the instrument cabinet. The "dissecting set" and tracheotomy instruments are sterilized as above, wiped with a sterile towel, and placed between the folds of a sterile towel in an instrument tray ready for instant use.

Sterilizing by alcohol.—Intubation tubes, knives, and other cutting instruments, after use, are washed with tincture of green soap and water, soaked in 65 per cent alcohol for *ten minutes*, dried with a towel, and put away. Thermometers are sterilized by immersion in 65 per cent alcohol for at least *ten minutes*.

*This is the third installment of the fifth article in a series on "The Care of Infectious Diseases in Hospitals." The first, "The Care of Infectious Diseases in Hospitals," was published in the April (1919) number of The Modern Hospital; "Medical Asepsis in French and English Hospitals," appeared in May; "Aseptic Nursing in American Hospitals," in July; "Construction of Isolation Hospitals," in August. The first installment of "Management of Contagious Disease Hospitals" was published in the September issue; the second installment in the November issue.

Disinfecting by soap and water and sunning and airing.—Soap and water, fresh air, and sunlight are important in disinfecting a room. The bed, bedside table, chair, lavatory, curtain cord, window sill, and door knobs are washed with soap and water, and the room is allowed to air as long as possible. A gown is worn for this work. Soap and water and airing for twenty-four hours are also used for the following: rubber sheets, ice caps, ice collars, and other rubber goods; shoes, gloves, and other leather goods; playthings which cannot be sterilized; and any other articles which would be damaged by sterilizing. Stethoscopes passing from one unit to another are washed with soap and water. All door knobs to doors of patients' rooms are washed every morning. When a door knob in a clean area is accidentally contaminated, it is immediately washed.

Disinfecting by airing.—Valuable clothing, hats, furs, and other articles that cannot be otherwise sterilized are aired in the sunlight for forty-eight hours.

Disinfection after barrier.—After transfer or discharge of a patient barriered in a single room, part of the room and its contents are disinfected. Linen is thrown down the laundry chute. Mattresses and pillows are aired, if the weather is fair, except when patients die or are transferred within ten days of the visit of their disease and after smallpox or typhus fever; all utensils are properly sterilized; bed, table, chair, lavatory, when used for only one patient, window sills and door knobs are properly washed. Playthings, books, and other belongings of the patient are destroyed, sent to the main sterilizer, or washed and aired.

After transfer or discharge of a patient barriered in the same room with other cases, the washing of room and furniture is confined to the bed, table, and chair. Otherwise the technique is the same as above.

Disinfection after detention.—When detention is omitted on a patient, he either remains where he is or is transferred to the convalescent room.

Fig. 2. Cards are placed on the doors to designate the different units, convalescent, barriered, and detention.

In the latter case his mattress, pillows, linen, and needed utensils are sent with him. His bed, table, and chair are washed with soap and water. Any utensils not needed further are disinfected.

After handling anything in an infected area, and before passing to another unit, the nurse scrubs her hands with brush, soap, and running water for three minutes after washing. The

Fig. 3. On the left is the door to a room containing three patients all in detention. Note the card on the door and the charts of the patients hanging on the right. The chart holder is never left in the infected area.

water is always turned on with the forearm, elbow, or foot. After handling measles, chicken pox, mumps or smallpox, the hands are immersed for an additional minute in 1-250 solution izol.

Delivery of specimens to laboratory.—Exposed sides of urine glasses, smear slides, and culture tubes are kept uninfected if possible. If infected, they are wiped off with 65 per cent alcohol, care being taken with the slides not to touch the smear itself. Urine glasses are covered with paper held in place by an elastic band near the top of the glass. Pairs of culture tubes are placed with one elastic band, and swab tubes within another. Slides are wrapped in paper or placed in an envelope. All are taken to the laboratory and placed in designated places. Care is taken to keep culture tubes right side up.

Histories and charts.—Histories and temperature charts are kept together on the same chart holder. The chart holder hangs outside the door of the patient's room and is never left in the infected area. In taking histories or examining patients, the house officer either carries the facts in his mind or dictates them to another physician or a nurse who is not contaminated. After removing his gown and washing his hands, the house officer makes or copies the notes on the permanent history blanks. All other notes about the patient's condition and treatment, and laboratory reports, are copied into the history at the nurse's desk. After the discharge of a patient, the history and charts are completed by nurse and house officer and taken to the office at once, without sterilization.

Taking T. P. R.—When there is only one patient in a unit, the temperature, pulse, and respiration are kept in mind, the hands washed, and the data at once recorded. When there are several patients in the same unit, the nurse puts on a gown, takes temperature, pulse, and respiration, records them on a slip of paper, removes gown, washes hands, and while a patient holds the slip or while it lies on a table or bed, copies the data onto the charts.

Reports.—Written reports from wards to office and from laboratory to wards are handled without sterilization.

Serving meals.—Trays for all patients are set in the diet kitchen. When ready, they are taken to the various rooms and placed either on the bed or on the bedside table. They all can be delivered without contaminating the hands. The nurse previously goes about and ties bibs on children when necessary. She then puts on a gown and feeds the small children, changing gown and scrubbing hands when passing from one unit to another. Trays may be collected one by one or in pairs, and are placed in the utensil sterilizer without the nurse touching anything except the trays. Remnants of food are thrown into the garbage can which stands near the sterilizer, the cover having previously been removed.

Serving medicines.—Medicines are placed on a tray which is passed to each patient, or the medicine is left on the bedside table without the nurse being contaminated. When small children have to be given medicines, the nurse wears a gown, changing it and washing her hands when passing from one unit to another. She finally collects the glasses from the several units and places them in the utensil sterilizer.

Administering antitoxin.—An antitoxin syringe and needle, which have previously been boiled, are flushed with saline in sterile water. A medicine glass is then sterilized with alcohol and the ordered dose of antitoxin is poured into it. The antitoxin is drawn into the syringe and the needle is put on. A tray is then prepared with the following articles: tincture of green soap and water, small piece of adhesive plaster, sterile cotton, cotton on toothpick, small amount of tincture of iodin in medicine glass, and the metal syringe containing the antitoxin. The nurse carries this tray to the patient's room and places it on the bedside table. She then puts on a gown, exposes the part into which the antitoxin is to be injected (usually the outer part of the thigh), and cleans a small area with tincture of iodin. Taking the syringe in one hand, and having expelled the air from it, she picks up the skin with the other hand. She plunges the needle in quickly and deeply into the muscle. The antitoxin is given slowly, the needle removed, and a piece of sterile cotton put on the spot and held in place with a piece of adhesive plaster. The syringe is rinsed and filled with tincture of green soap and water from the tray. The nurse washes her hands, removes gown, scrubs her hands, and takes the tray to the utensil sterilizer. The syringe is washed in tincture of green soap and water, and boiled; the needle is sterilized in 65 per cent alcohol. The syringe is oiled with sweet oil and an oiled stillette is inserted in the needle.

Hypodermic injections.—The nurse carries to the patient's room the hypodermic syringe (previously filled at the medicine closet), alcohol, and a small piece of cotton. A gown is worn if necessary. The part to be injected is wiped off with the cotton wet in alcohol, and the injection is given. The cotton is destroyed, the syringe is placed in 65 per cent alcohol, and the nurse washes her hands.

Nasal irrigations.—Instruments used: irrigation can with tubing, No. 12 F. catheter, warm solution, basin, and a small piece of rubber sheeting sometimes. The nurse puts on a gown, holds the child's head over the basin or sheet, and inserts the catheter into the nares, first one and then the other, getting a return from the other nares if possible. The can and tubing are left by the bed; the nurse washes her hands and removes gown; the basin and catheter are boiled. The nurse is careful not to allow secretions to be blown into her face.

Aural irrigations.—Instruments used: syringe, warm solution, pus basin. The nurse puts on a gown, fills the syringe, and asks the patient or another nurse to hold the basin to catch the irrigation. After finishing the operation the nurse scrubs her hands, removes gown, washes basin, and boils syringe. Drops or powders to be used after irrigation are left on the patient's shelf.

Fig. 4. Frame for airing and sunning the mattresses and pillows. They are sent to the sterilizing room only in cases of smallpox, typhus fever, or after cases which have been transferred or have died within ten days of the visit of the disease.

Thermometers.—Each unit has its own thermometer. If the unit contains several patients.

as in the convalescent rooms, several thermometers may be employed for convenience in taking temperatures. Thermometers are kept in covered glass jars containing 65 per cent alcohol. When several temperatures are taken with the same thermometer, in a unit containing several

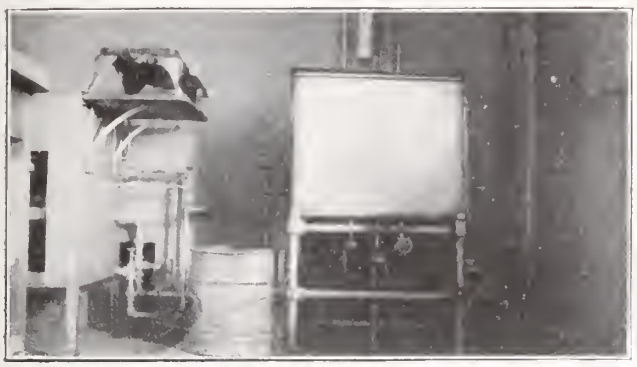


Fig. 5. Utensil sterilizer, with swill can beside it. Each ward is equipped with two large utensil sterilizers, the covers of which are operated by a foot lever. Articles are left in the sterilizer fifteen minutes after "boiling" begins.

patients, the thermometer is wiped off and put into alcohol for at least one minute before use on each patient.

Throat stieks.—Wooden throat sticks are kept in small pasteboard boxes cut a little shorter than the sticks. When one is wanted for use, the nurse holds them in their box while the physician removes one. The opposite end of the stick is put into the mouth. After use, they are put into a pus basin which the nurse carries, or into a paper bag which may hang from the bedside table.

Disposal of linen.—Soiled linen is made up into small bundles and dropped down the laundry chute, the door of which is opened with the forearm. Badly soiled linen is first washed out at the hopper.

Disposal of seeretions.—An opened paper bag is attached to the bedside table by adhesive plaster to receive articles soiled with secretions. Into it pieces of gauze or compress are thrown. When secretions are profuse, a rubber slip is put on the pillow beneath the linen slip; a square of cotton cloth is also placed under the patient's head and thrown into the paper bag as frequently as necessary; pillow cases are changed often. In cases of vaginal gonorrhea, all pads are thrown into the refuse can; all instruments used in such cases are boiled.

Disposal of dropped artieles.—If pieces of linen, throat sticks, towels, or any other articles, are dropped on the floor they are considered contaminated and must be destroyed or properly disinfected.

Disposal of eontainers.—Medicine bottles are thoroughly washed and sent down the dumb waiter to be collected by the drug-room porter. Powder boxes are also returned for refilling. The steam table dishes for cooked food are washed after using and sent down the dumb waiter to be collected by the kitchen porter. All other containers—paper bags, paper dishes and wooden trays are thrown into the refuse can.

Disposal of waste.—Each ward is provided with garbage and refuse cans. The garbage can is kept beside the utensil sterilizer and the refuse can in the toilet room. These cans are collected daily.

Preparation of bodies.—Bodies are, of course, considered infectious and the aseptic technique is carried out just as in life, so long as they remain in the ward. After taking the necessary supplies to the room, whoever lays out the body puts on a gown, removes the linen from the bed and covers it with a rubber sheet, and lays out the body in a proper manner. It is then carefully pinned up in a sheet and the porter is called to remove it to the morgue.

Signing doeuments.—Legal documents and other papers may be signed without the necessity of sterilization, as follows: A clean towel is laid on the bedside table and the document is placed upon it by the nurse. The document is then covered, save the place for the signature, by one or two hand towels. While the nurse holds the towels and document steady, the patient to whom an inked pen has been given, affixes his signature. Thus the document remains uncontaminated. Then the nurse, with hands still clean, removes the document. The towels are thrown into the laundry chute; the pen and pen holder are washed with soap and water.

MISCELLANEOUS RULES

Toilet rooms.—In the main wards, toilet rooms are reserved for convalescent patients as described under "Convalescent Technique." In the isolation wards, a toilet room may be reserved for a certain group of convalescents and is marked by a card bearing the name of the disease or the names of the patients who may use it. When it is to be used for another disease, all the area likely to have been touched by patients is washed with soap and water.

Bed making.—When making beds, the nurse wears a gown, changing it between units and washing her hands. The bed-clothing is placed on the patient's chair or table while the bed is being made. Bed linen is changed as frequently as necessary, and always once a week.

Sweeping.—Before sweeping, the floors are sprinkled with oiled sawdust. Each room is swept separately and the dust is taken to the refuse can, which has been left uncovered. Between rooms the broom is scalded under the hopper

faucet. The corridor and all other uninfected areas are swept at one time.

Mopping.—A separate mop is used for all infected areas and is scalded, between rooms, in the hopper. Another mop is used for all uninfected areas.

Bed pans and urinals.—All bed pans and urinals are emptied directly into the hopper and washed with running water. The water is turned on either by the forearm or the foot. They are then placed in a utensil sterilizer and sterilized when a sufficient number accumulate.

Visitors.—Visiting the wards is permitted only to the friends of the dangerously ill and to friends of private patients. The office notifies the ward when a visitor is to be expected. If the visitor enters the patient's room, the nurse in charge puts a gown upon him and stays with him during the entire visit except under special conditions when the visitor is known to be intelligent and trustworthy.

The visitor is not permitted to kiss or handle the patient or to touch anything in the patient's room. If by chance such contact does occur, the visitor is directed to scrub his hands and wash his face. The gown worn is thrown down the laundry chute unless it is needed for use in the unit occupied by the patient visited.

Patients' packages.—All packages for patients from relatives and friends must come through the office.

Playthings belonging to a patient barriered in a room with other patients are tied to his bed.

Valuables.—Money, jewelry, and other valuables belonging to patients are listed, washed, and sent to the office. The head nurse must in each case receive a receipt for all such valuables delivered to the office.

General rules for patients.—Patients must stay in their own rooms unless allowed to go outdoors or to the toilet room. If children come out of their rooms or throw things out, they are kept in bed and, if necessary, the door is closed. Children who are unable to walk well are kept in bed throughout their hospital residence.

Gowns.—Gowns are worn by nurses for any work which involves intimate contact with the patient. The gown is taken from the hook and slipped over the arms in such a way that the nurse is not contaminated. After finishing her work the nurse scrubs her hands and folds the gown down the middle, clean surface inside, and hangs it on the hook in such a way that it can be slipped on again without contamination. Finally the nurse washes her hands again. If no gown is worn, the nurse is careful that none of her clothing shall touch the bed or anything in the patient's room, and only contaminates her hands or forearms, which can be scrubbed with soap and water. Gowns are changed at least twice a week and oftener if soiled with secretions.

Operating technique.—The operating room is an uninfected area and the infection must be confined to operating table, instrument table, and etherizer's stool. Everything is made ready for the operation. The patient is brought in and etherized on the table. The nurse in charge of the ward is present to see that there are no errors in technique and to wait on the operators.

After the operation the patient is removed to his room. Those engaged in the operation remove their gowns, leave them on the table, and scrub their hands. Linen is thrown down the laundry chute, instruments are boiled, waste is thrown into the waste can, and operating table, instrument table, stool, and floor are washed with soap and water.

(To be continued)

Texas Boys Overcome Handicaps

Disabled service men are learning how to earn their own living in a new vocation with the aid of the Federal Board for Vocational Education. One Young Texan, who lost his left arm in service, has been offered five dollars a day and his board to operate a tractor on a farm. He spent eight weeks in the tractor and gas engine training school, following it by placement with a tractor company.

Another farmer boy, who lost his leg from wounds received in service, has a position in a bank waiting for him as soon as he completes his course in bookkeeping and accounting.

Losing an eye in the service, another Texas boy studied gas engines and tractors, and then entered his supplementary place training. His work was so satisfactory that the manager of the plant at which he was placed commended him, and gave him a forty-dollar bonus check for the month.

Serbians Again Making Rugs

Once more Serbians are taking up the making of rugs and tapestries, which was one of their principal occupations before the war. Serbian rugs have ever been noted for the richness of their color and design as well as the durability of their dyes. Though the country has suffered much from its seven years of warfare and pillage, the knowledge of weaving and dyeing has been preserved.

Serbian women have organized a school of weaving and here they work almost entirely at hand looms. Red Cross workers who by feeding and clothing the suffering population helped them to re-establish their normal occupations, are bringing back samples of rugs and tapestries to this country. In making a market for the Serbian wares the Red Cross Commission is fulfilling its object, which includes not only the performance of relief work, but the establishment of means whereby future relief will be unnecessary.

BRINGING THE CHRISTMAS SPIRIT INTO THE HOSPITAL

Unequalled Opportunity Afforded to Make the Patient Happy During Holiday Season—How Various Hospitals Have Provided Entertainment and Yuletide Cheer—Contagious Hospital Introduces "Aseptic Christmas"

By HELEN A. LEONARD

CHRISTMAS! Doesn't the very word send the blood tingling through you and make you think of wreaths of holly—of trees shimmering in electric lights—of tiny stockings over fireplaces stretching forth their anticipating toes to a goodly-sized Santa—of bustling crowds, and prosperous, well-fed business men hurrying through snowy streets, arms burdened with bundles? Christmas is a word indissolubly linked with thoughts of home and fireside. But what of those for whom Fate has ordained otherwise? What of those for whom Christmas means nothing more than a white iron bed, four narrow walls, nurses' and doctors' orders, and the ceaseless round of hospital routine? What of those whom pain and suffering have well-nigh deadened to all thoughts of happiness and rejoicing? For such as these, can there be a "Merry Christmas"? Yes, indeed! Christmas typifies the very spirit of service, in bringing happiness to others.

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Fig. 1. The huge Christmas tree, laden with all sorts of fascinating colored lights, festoons, and gorgeous balls is a breathless delight to the little boys and girls in the New York Hospital for Ruptured and Crippled Children. A small-sized Santa Claus is seen presenting a large, mysterious package to one of the little girls who isn't able to walk around.

The real Christmas spirit should abound in the hospital during the holiday season. With a little sacrifice and effort, genuine Christmas cheer may be brought to the patient at slight expense. Many of the hospitals find that the actual outlay for the holiday season is unusually small—in fact, almost insignificant—in comparison with the manifold benefits received.

Cooperation of the staff, the nurses, and the various departments in planning and arranging the various festivities will often achieve astounding results, and many indeed are the novel ways of observing the spirit of Yuletide when all enter into the idea with enthusiasm and work in harmonious cooperation.

Christmas, 1918, was brought to hospital patients in an endless number of ways. The Boston City Hospital provided Christmas trees in each of the wards, which were decorated by the nurses. In the children's ward colored lights were used. The presents were obtained by donations from the visiting staff and interested friends and by purchase from the hospital fund. At the South Department (for contagious diseases) one of the doctors, acting as Santa Claus, visited each of the wards and presented the children with Christmas presents. On Christmas morning, an entertainment, provided by the various theaters in Boston, was held in the Surgical Amphitheater, and was attended by all the patients who could possibly be moved. All patients whose diet permitted of it were served with an excellent turkey dinner.

Christmas at the Rhode Island Hospital, Providence, R. I., really began two weeks before the actual date. This is a large general hospital of 500 beds which has, in addition to the regular departments, a large orthopedic service. The patients include, therefore, a large number of children, some of whom have been in the hospital for two, three, and even four years. Naturally these children play quite an important part in the Christmas festivities.

For two weeks or more before Christmas, presents for the children were received from residents of the city and from many friends outside who have become interested in the work of the hospital. On the Sunday afternoon preceding Christmas the vested boy choir from All Saints' Church sang to the patients. The clear child voices made the beautiful Christmas carols sound very sweet and impressive. The real festivities which all the tiny patients of the hospital attended were ushered in by a Christmas tree in the children's ward and an entertainment given by the children. As the guests entered, they were confronted by children in beds, children on Bradford frames, children in wheel chairs, and children in ordinary chairs,—all looking with expectant eyes at the Christmas tree in the middle of the room. The entertainment started at four in the afternoon, and consisted of songs, recitations, and dialogues by the children under the direction of their teacher. As is her custom every year, a leading musician of the city, who is a devoted friend of the children, furnished entertaining music throughout the evening.

The climax of the entertainment was the unloading of the Christmas tree, which held gifts for every child in the hospital. Sleigh bells were heard in the distance, growing nearer and nearer, and soon a regular Santa Claus covered with snow came through the window and directed the distribution of the gifts. Practically the entire number of visitors present planned to attend each year. The president of the board of managers and a number of the board members and their wives, who were among the guests, enjoyed the festivities as much as the children themselves, while the convalescent patients helped to swell an appreciative audience.

On Christmas morning the nurses went from one ward to another singing Christmas carols. One of the interns accompanied the singing with his violin, and the effect was a very pleasant ushering in of a happy day. The wards, decorated with greens and flowers from the hospital conservatory, looked very festive. Every patient (except those on special diet) had the regulation Christmas dinner with all the accessories.

Santa Claus did not visit the children in person again on Christmas day, but he must have called during the night, because in the morning each child found himself remembered in some way. In the afternoon ice cream was served to them and, in spite of the big dinner and general excitement, was very much enjoyed. The friends of the patients who came to visit during the afternoon, expecting to find them downhearted and lonely, were surprised to discover that even in a hospital it is quite possible to have a Merry Christmas.

Of course, there is the story of how the nurses enjoyed Christmas, of the packages they received, and of the party given to them in the evening by the hospital, but these things, while enjoyable, were to them mere incidents. Their real Christmas consisted in trying to see that every patient was happy and cheerful, and in bringing to the wards the Christmas spirit. If they were lonely they did not show it, and more than one said at night that, though she was very tired, she had had a perfectly wonderful day.

At the Presbyterian Hospital, New York City, the staff and various departments decided that they would bring to their patients a realization of what a joyous, happy day Christmas can be, even to those confined in an institution. They really had two Christmas days. The first was the Out-Patient Department Christmas, which occurred two days before Christmas, and was given over to the poor children who had been or were being treated by the hospital, as well as to children of families which the Social Service Department had discovered in their outside district nursing.

This might really have been termed a "Christmas of useful-giving," for each child received from the tree and from the real live Santa presents which would keep his little body warm and "comfy" when the winter winds howled and shrieked. Shoes, sweaters, caps, mittens, and underclothes were among the things distributed. Santa, however, did not forget that they were children, and he included in his gift-bag plenty of toys to make little hearts glad.

Then, of course, there was the real Christmas for the patients. On Christmas Eve after the lights were turned out, the Christmas Carol singers (who, in ordinary life, are doctors, nurses and employees of the institution) passed through the wards announcing the glad message of Yuletide.

Christmas morning brought the breakfast trays decorated in holly and each bearing a holly spray and a small gift from the institution. The big event of the day was the unburdening of the huge Christmas tree, which stands in the children's ward, laden with gifts for the children and with "practical-joke" presents for each member of the nursing and medical staff. This was, in reality, a hospital reunion, for it was attended, as is the custom each year, by many former employees and staff members who have never forgotten "old Presbyterian." Santa, drawn in by reindeer, first distributed the gifts among the children, and then proceeded to read the jokes on the various mem-

bers of the staff, making each step out before the assembled audience as the joke relating to him was read. Needless to say, there was much obvious trembling, for the little frailties had not been overlooked in the choosing of the individual gifts and the rhymes to accompany them.

This excitement was climaxed by a generous Christmas dinner, and in the late afternoon the choir from a neighboring church passed through the wards, giving the patients a treat in real Christmas music.

The festivities at Presbyterian Hospital, Chicago, were many and varied in character, extending as they did over several days. On the evening of the twenty-third from 7:30 to 9:30 there was the community party for children, given under the direction of the social service department. This was a celebration given to the children of families in which the social workers of the hospital are interested, and the tiny guests in attendance numbered seventy-seven. They ranged in age from two to fourteen, included both girls and boys, and averaged from two to five children from each family. As the party was held in the nurses' home, many of the nurses aided in the trimming of the tree and decorations. Of course, there were the songs, stories, and games that delight the little folk, and the kindergarten nurse gave a juvenile version of Bethlehem and the first Christmas. Best of all, there were huge portions of ice cream and cake, without which, of course, it would not have been a party. Mothers and big sisters appeared promptly at 9:30 to escort the happy little guests home.

On the following evening (Christmas Eve), the grown-ups of the hospital had their entertainment in the chapel. All convalescent and wheelchair patients attended. The program was rendered by professional talent, and from 7:00 to 8:30 the patients were made to forget their hospital surroundings and were transported to a fairyland of Christmas joy. On the same evening the nurses and interns held a party in the nurses' home, at which they made merry in true Yuletide fashion. The tree which had been used for the community children's party lent itself equally graciously in giving cheer to the grown-up workers.

Early Christmas morning a group of carolers wended their way through the various corridors and up and down the stairs singing the old, sweet song of the first Christmas morn. To the patients in bed the voices seemed to ebb and fall, coming nearer at times and gradually fading away, thus reproducing more realistically the original Christmas carols. Fourteen volunteers of the 200 nurses composed the group.

The entire hospital appeared in festive array—offices, corridors, and even elevators were gaily trimmed. All the wards were decorated in Christmas colors, festoons were hung from the corners and wound about the electric fixtures, and in the children's ward red lights were used throughout. The twenty-four trees used in various parts of the hospital were all trimmed in the occupational therapy department, and all trimmings such as paper chains, stars, and Santa Clauses, were made by the workers in this department.

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Fig. 2. Receiving a beautiful baby doll, with real hair, and eyes that open and shut, is only one of the endless joys of Christmas for these little tots of the Italian section of New York's lower east side.

When the breakfast trays were brought in on Christmas morning, each patient found a tiny Christmas card, bearing the personal greetings of the superintendent, and tied with a sprig of holly. A big Christmas dinner was served to each patient who was permitted to have it.

At the Englewood Hospital, Chicago, the Christmas spirit was brought into every room and ward. The ceilings were hung with vari-colored festoons, and the lights glowed softly under red and green tissue shades. Even the halls put on a distinct holiday appearance with their wreaths of holly and mistletoe intertwined about the gas jets and draped gracefully along the walls. In the children's ward a huge tree with its rainbow-colored electric lights shone forth upon a merry party of little ones, who ranged from babyhood to fourteen years of age, and included all who were able to leave their beds. Boxes of candy, donated by friends of patients or interested outsiders, were distributed and hastily consumed.

For the older folks there was a party in the assembly room, and every patient who could manage to do so by hook or crook or crutch was numbered among those present. The less fortunate

were entertained at their bedsides. Volunteer workers went through the wards telling Christmas stories and bringing Christmas cheer. Downstairs in the reception room a group of nurses sang of the Infant birth, and the strains floated softly through the corridors to the bed-ridden patients.

The festivities at St. Bernard's Hospital, Chicago, were perhaps typical of those in the majority of Catholic hospitals. Every soul in this institution, from the highest official down to John, the elevator man, felt the warm, kindly glow of the Christmas spirit. The hospital itself fairly radiated with a Christmas atmosphere. Wards and halls were trimmed with tinsel, wreaths, and red tissue bells, and the colored corridor lights gleamed softly on the festoons wreathed beneath them. All was so fresh and radiant one would hardly suspect that the same trimmings are used each Christmas and packed away carefully from year to year.

Each ward had a Christmas tree, decorated by the patients, with the aid of the nurses and the nuns, on which each patient hung little gifts intended for other patients, all daintily wrapped and labeled. The distribution of these gifts on Christmas morning, of course formed no small part of the day's festivities.

On Christmas Eve the trees were lighted, and the chaplain of the hospital visited every patient individually, giving him a tiny colored picture of the Saviour's birth and extending to him personally the greetings of the hospital.

At the solemn hour of midnight, high mass was celebrated in the chapel, which was attended by patients, nurses, and nuns. The chapel was beautifully decorated with flowers, festoons, and wreaths of evergreen, and in one corner a tiny crib, a miniature representation of Bethlehem, reflected the soft shadows and flickering lights from myriads of candles which surrounded it. A choir of nurses and nuns sang Christmas carols, and the old, old story of the manger and the Star in the East was told by the chaplain in his sermon.

Masses were also celebrated at 6 a.m., 7 a.m., 8:30 a.m., and 9 a.m., and attended by nurses and patients.

The Christmas dinner, served to every patient, nurse, intern, and employee in the hospital, consisted of soup, roast turkey, mashed potatoes, cranberry sauce, celery, pickles, bread and butter, tea, mince pie, nuts, fruit, and candy. Each person in the entire institution received the same kind of meal. Christmas night closed with a religious service at 7:15 p.m.

Christmas Eve the nurses staged a royal Christmas celebration at the home. The Christmas tree was the largest obtainable, and on it there was hung a gift for each one of the sixty-one pupil nurses and the nuns. No one was forgotten. The

Fig. 3. Festoons of cedar and wreaths of holly bring Yuletide brightness to the youngsters.

nurses exchanged gifts among themselves and for those who were not remembered the hospital provided a gift. Festivities began promptly at 8 p.m. with carols by the nurses. One of the nurses recited "'Twas the Night Before Christmas" and just at the words which introduced Kris Kringle, Santa himself appeared around the corner with his reindeer, both Santa and the reindeer being impersonated by nurses. After the real gifts were distributed, Santa passed a basket from which each guest drew a number. The reindeer then passed to the guest the gift from the tree bearing the corresponding number. These were humorous gifts—trinkets chosen to be as humorous as possible—and they furnished no end of amusement.

In the dining room a luncheon was served consisting of sandwiches, salad, ice cream, nuts, fruit, candy and coffee. The tables were decorated by the nurses. Dancing closed the program.

Each employee, no matter how humble his station, was remembered on Christmas Eve. When he received his salary check, he received a gift wrapped in holiday trimming and bearing a Christmas card with a holiday wish from the hospital. The men received ties and the women aprons, bar pins, combs, and like articles.

Each intern found a box of cigars and a card from the hospital at his place at the dinner table on Christmas day. The woman intern received a silver lavalliere. Each nurse received in addition to her gift on the tree, a token from the superintendent of nurses.

So all were remembered in true Christmas fashion in this hospital, and the spirit of the holidays assuredly reigned supreme.

Mercy Hospital, Pittsburg, introduced quite an innovation in the matter of Christmas decoration. In addition to trimming the departments and adjoining corridors with holly, spruce, and smilax, wreaths were placed in the windows and Christmas mottoes cut out in cardboard with green tissue in back of the cut letters were hung about in various places where they could be illuminated from behind with electric lights, which threw the letters out in bold relief and produced a very charming effect. The Christmas festivities in this hospital closed with evening benediction.

St. Thomas Hospital, Nashville, Tenn., celebrated what might appropriately be called "a Christmas of the poor." Because of the general poverty and desolation resulting from the world war, the authorities and nurses of this hospital decided to make Christmas, 1918, a memorable one in their history of their labors among the poor.

To raise funds the pupil nurses, during November, gave a play entitled "The Spinster's

Fig. 1. The joyous spirit of the holiday season is reflected in the smiling faces of the women's ward.

Convention" to which doctors and friends were invited, with the announcement that the admission would be "Whatever you Think 'Tis Worth." The sum of $120 was cleared, which was indeed gratifying, considering the fact that not a moment of class study or duty time was taken for practice or rehearsal.

On Christmas Eve, when the nurses gathered for dinner they found the dining room a blaze of Christmas light and cheer, each of the ten tables having a decorated Christmas tree in the center, with red and green electric lights suspended from the chandelier above, while at each place were the numerous gifts from home, friends, and hospital authorities.

At 11:30, all were awakened by the choristers singing the "Adeste Fideles." Quickly the little chapel filled for midnight mass, after which all retired to wait the coming of the festal day.

On Christmas morning a number of Sisters and nurses visited the state penitentiary, where mass was celebrated for the poor prisoners. After distributing little gifts and candy to the prisoners, they returned home in time to receive the guests invited for the afternoon. At 3 o'clock forty or more poor children, many of them accompanied by their fathers and mothers, arrived at the nurses' home in the spacious recreation hall of which a huge Christmas tree and a real live Santa (one of the interns) awaited them. Nurses had spent their "off-duty time" in decorating the tree and making and filling stockings, which now fairly bulged with oranges, apples, nuts, candy, and toys. After the distribution of the gifts to the little ones, the Sisters and nurses served hot cocoa and cake, and then all attended benediction in the chapel, where the joyous faces of the recipients of gifts told more plainly than words how great a ray of sunshine had been brought into their poverty-stricken lives.

Another feature of the Christmas program was the filling at the hospital and distributing to the homes of the poor, about fifty Christmas baskets, each containing a complete Christmas dinner.

Of course, the patients, the most important of all, were not forgotten in the general plan of making others happy, and everything possible was done to make them forget that they could not be at their own firesides on Christmas Day.

As practically every moment was spent in serving others, it was unanimously decided that the nurses' real Christmas dinner should be postponed till some later day during the holidays, when more time could be devoted to their amusement. And the nurses declared that, although their later celebration was excellent, they had never enjoyed themselves more than they had on Christmas Day, because the happiness of heart they had experienced in serving others could be equalled by no festivity of their own.

Seton Hospital, Spuyten Duyvil, New York, also began their celebration on Christmas Eve with mass in the chapel, preceded by the rendering of the "Adeste Fideles" by a choir of little girls. The artistic decoration of the chapel and the sweet clear voices of the children added a note of fervor and impressiveness to the solemn service.

The morning festivity consisted of the distribution of gifts from the tree, followed by a hearty dinner. During the afternoon nuts, candy, and fruit were given out in abundance, while various kinds of music cheered and enlivened the patients. In the evening a splendid concert was given, and, after a short religious service of thanks, taps sounded at 8 p.m.

And now comes a unique type of celebration—something we may well call an "aseptic Christmas." Festivities of this sort for patients suffering from different kinds of contagious diseases are not easy to arrange without danger of transmitting disease from one patient to another. Providence City Hospital, Providence, R. I., has admirably solved the problem, however, as proved by their Christmas program of 1918. In the large convalescent wards Christmas trees were set up in each, decorated with electric lights and presents. It was not possible to provide each of the many separate rooms and the rooms in the isolation wards with a Christmas tree for each, although small artificial trees were set on bedside tables in one isolation ward. Trees in the main corridor were decorated and hung with presents. These trees stood on a base which was provided with small trucks. Two or three of the hospital employees, dressed as Santa Claus, proceeded to one of the wards and, with the help of the nurses, pushed the decorated tree and a wheel stretcher with presents along the corridor from one room to another so that each child could see Santa Claus and obtain a view of the Christmas tree while Santa, with great care not to touch the children or anything about them, distributed the presents to each little tot. When the children who occupied side rooms were all provided with the gifts they wrote Santa for, the procession moved into the convalescent ward, where Santa Claus continued to distribute presents without infecting himself, for he still had other wards to visit. They passed to subsequent wards and the same process was repeated. The children seemed to enjoy themselves just as thoroughly as though there was one large hall where they could congregated in one big group for the Christmas tree.

Fig. 3 The Christmas decorations used at the Presbyterian Hospital of Chicago are made in this room by the patients in the occupational therapy department.

So, even in a contagious hospital, Santa and his festal day need not be forgotten. In every hospital, regardless of its size or nature, something may be done to make the patient forget the hardship of being separated from his family fireside on Christmas Day. And the bigger, broader, and more generous the spirit which prompts and directs the program—the more unselfish the sacrifice in bringing Christmas joy to the hearts of those who suffer—the happier will be the festivities for both staff and patients and the greater the self-satisfaction of the workers in the knowledge that they have experienced earth's greatest honor —the high privilege of service.

Plans for Rehabilitating Tuscany

Future American tourists in Tuscany will imagine themselves suddenly transported to California, if the plans of the American Red Cross now under way for rehabilitating the district recently laid waste by the earthquake materialize. As soon as news of the disaster reached American Red Cross headquarters in Italy relief parties were dispatched to Tuscany, the list of workers including two contractors. American Red Cross and Italian contractors discussed plans for rebuilding the devastated area, and the Americans recommended the low, solidly built type of house popular in California—of stone or concrete, with roof firmly attached.

While awaiting the decision of the Italian Government the natives are being housed in tents and portable houses. The portable house manufactured by the Red Cross in France, cooperating with the Friends' Unit and the French Government, has proved invaluable in this emergency. A large shipment of these houses was sent to the stricken district immediately upon receipt of news of the earthquake, and with hammer and nails they were soon erected. Instructions for erection accompanied each house, so that even an inexperienced workman could put it up without difficulty.

Health More Important Than Landscape

The old oaken bucket that hung in the well may be dear to the heart, but it's dangerous to the system.

The time honored well sweep and windless were one of the picturesque features of the typical Polish landscape—until Polish and American Red Cross sanitarians at the head of the Polish public health work decreed that health was more important than landscapes. Though the bubbling spring by the roadside sounds well in poetry and the maiden drawing water from an old-fashioned well is pretty in pictures, every open well is a potential epidemic breeder. With typhus and cholera raging throughout Poland, these wells are considered by the health authorities a direct means of contagion, exposed as they are to all sorts of contamination.

The American Red Cross health experts, who are cooperating with the native government in formulating a permanent health program, have discovered substitutes for the old wells. In the supplies abandoned by the Germans when they were forced to quit the country were found hundreds of pump connections, suction joints and valves in salvage warehouses. These will be used in addition to the modern wells which the Americans are constructing in several towns.

BEAUTIFUL MUSIC BRIGHTENS CHRISTMAS IN THE HOSPITAL

Message in Song of the Birth of Christ Brings Peace and Joy—Handel's "Messiah" Should be Sung Wherever Possible—Author Gives Carols, Anthems, and Cantatas Appropriate for Christmas Use

By DeWITT DURGIN LASH

"THERE were shepherds abiding in the fields, keeping watch over their flocks by night. And lo, the angel of the Lord came upon them, and the glory of the Lord shown round about them, and they were sore afraid." And the angels said unto them, "Fear not, for behold, I bring you good tidings of great joy, which shall be to all people. For unto you is born this day in the city of David a Saviour, which is Christ the Lord."[1] And suddenly there was with the angels a multitude of the heavenly host praising God, and saying, "Glory to God in the highest, and peace on earth, good will to men."[2]

When this message was first heralded to the world two thousand years ago, it brought peace and comfort to all who heard it. The heart of humanity is the same today. This wonderful story of the birth of the Saviour always brings its great blessing, as year after year it is told through the beautiful arias, recitatives, and choruses of that oratorio, greatest of all oratorios, the "Messiah." This great work of George Frederic Handel is sung by the choirs and choruses the world over.

So in looking for appropriate music for our hospitals at Christmas time, we turn to musical literature which contains many and varied forms of musical writing bearing this message.

There is a wealth of Christmas music adaptable for the various organizations, bringing the spirit of the Christ Child to all the shut-ins, who will hunger at this our most beautiful season of the year for some word or song expressive of that spirit.

It is therefore most fitting that all hospital authorities get in touch with the choirs and choruses in their respective communities who are capable of rendering "The Messiah," and plan for such an evening. This is possible in all the larger hospitals of our cities.

Where so broad an undertaking is impossible, suitable Christmas carols, anthems, songs, and cantatas, may be found, which can be used by the amateur organizations very creditably and, in many instances, by members of the hospital organizations.

Then in the public schools the country over, the children in the grades, up through the high schools are taught Christmas carols and easy cantatas, and are wonderfully responsive when invited by the hospital authorities to come to the hospitals to render them.

The musical instructors in the respective schools are always willing to coöperate in this and to take charge of the entertainments or services. The early morning hours, if found convenient, are significantly appropriate for this form of choral singing and spiritual uplift.

In preparing a paper of this kind it is impossible to give a complete list of the traditional carols, and all other forms of compositions in general use, but I will endeavor to list a varied number which I know to be of true musical worth.

"The Ditson Collection of Ten Traditional Carols" for Christmas, published by The Oliver Ditson Company, Boston, Mass., is one of the first numbers I wish to call attention to.

This group contains some of the rarest gems of musical literature, and is especially adapted to the average musical organization. It contains "Martin Luther's Carol," "Away in a Manger," "Silent Night," "Good King Wenceslas," "We Three Kings of the Orient Are," and "Shepherds! Shake Off Your Drowsy Sleep," one of the old French Besancon carols. I particularly commend this collection.

"Community Christmas Carols," by Novello & Co., Ltd., is another fine group. It contains some of the same numbers listed in the Ditson edition, but has a number of others quite worth while, including, "The First Noël," "Adeste Fideles," "God Rest You Merry Gentlemen," "The Cherry Tree Carol," "The Holly and the Ivy," "Recessional Hymn," "O, Little Town of Bethlehem." The H. W. Gray Company of 2 West Forty-fifth street, New York, are the sole agents for this book. It is inexpensive and will be found very helpful and satisfactory.

A list of carols in octavo form may be desired by some, and a few known favorites are: "Shepherds, Watch Thy Rest at Night," by H. E. Parkhurst, Litson edition, No. 12,696, price 8 cents; "The Guiding Star," by George B. Nevin, Ditson edition, No. 11,044, price 8 cents, another beautiful carol; "The Sleep of the Child Jesus," by F. A. Gevart, adapted from the French, with words of the English version by Charles Fonteyn Manney, is without question one of the loveliest carols in all of our splendid list. It is a soprano solo, with

[1] Luke II, 8-12. [2] Luke II, 13, 14.

mixed voices, not too difficult, but with a charm in its melodic idea that is most pleasing. "Six Christmas Carols," Third Series, by The Ditson Company, No. 11,982, is for voices in unison and mixed voices, but can be used effectively by the female voices. This group is also adaptable for amateur singers, especially those connected with the hospital corps. Many times I have been requested by the nurses associated with the hospitals to give the name of just such a group as this one.

"Alleluia Kyrie Christe," Old French Carols, translated by Avery Gaul, arranged by Harvey B. Gaul, is as fine a writing for music of this character as I have ever known. It is harmonized beautifully, yet simply, but with a certain dignity. It is for mixed voices, and should be sung by every quartette, choir, and chorus which desires an appropriate carol for the Yuletide. Published by The Oliver Ditson Company, No. 12,376, price 12 cents.

"Six Old French Carols," harmonized and edited by one of our leading musicians, Mr. Kurt Schindler, with the English version by the well-known Henry G. Chapman, are a joy for the children's wards, and should be sung by all children's choirs. They contain "Little Jacques," "Come Anthony, Come Peter," "Noël Provencal" (from Noëls of Sabaly, 1670), and "Let a Song in Sweet Accord." Surely these little gems will find a place in the repertoire of all carolers, for they *are* little gems.

"Six old English and French Christmas Carols," selected and edited by Charles Fonteyn Manney, from the press of The Ditson Company, price 10 cents, in a rare collection. These carols should be sung by every organization which desires the best. They are adapted for boys' choirs, children's choirs, girls' choirs, ladies', men's and mixed choirs, and, in fact, can be used effectively by any kind of an organization that sings well. I have been most happy over results obtained from using this beautiful collection of carols.

I have been requested from time to time to recommend cantatas for use at Christmas time. It seems very appropriate to include a short list in this article.

"The Angel and the Star," a two-part Christmas cantata for women's voices, by Ira Wilson, is a lovely short cantata, adapted to the needs of a small group of singers, and a most welcome addition to the repertoire of the small organization where the men's voices are in the minority.

"God With Us," by Elizabeth Burgess Buford is another good cantata for women's voices, not too difficult, and very effective.

"The Tree of Promise," a Christmas cantata of considerable musical worth, by E. S. Lorenz, can be used with splendid results without a very great expenditure of either time or talent. This cantata has been worked out carefully, and I commend it to organizations wanting a short Christmas service. These three cantatas are published by Lorenz Publishing Company, 218 South Wabash avenue, Chicago.

"The Story of Bethlehem," a sacred cantata, by Daniel Protheroe, is one of the most appropriate cantatas for use as a Christmas service at our hospitals that I can name. Where the "Messiah" by Handel is not possible, this cantata *is* possible. It deals with the story of the Christ Child, from its birth in the manger at Bethlehem, through the many periods of our Lord's life, and contains much that is beautiful in its melodies. Mr. Protheroe has caught the spirit of the message of the Babe of Bethlehem and portrays it in ways most helpful. I cannot emphasize too strongly the responsibility resting upon the authorities of our hospitals to bring to those entrusted to their care these wonderful messages of the "Messiah." Gamble Hinged Music Company, Chicago, are the publishers.

"Arise, Shine, for Thy Light Is Come," by James Rogers, No. 11,174, Ditson Company; "Sing, O Heavens," by John E. West, No. 136, Sumny & Co.; "A Christmas Message," Eugene Dressler, The Ditson Company; are three splendid anthems for use at the Christmas services. They are of medium grade, and very singable.

For children's voices, I would suggest "With Exulting Tribute," Meredith. "Peaceful Night," by Snelling; "Sing Out Your Gladsome Carols," by Lowden; "Waking Out of Silence," by Tullar; "Worshipful Counsellor," by Meredith. These constitute a splendid list of hymn-anthems for the children's choirs and organizations for Christmas. Tullar, Meredith Company, publishers, 14 West Washington Street, Chicago.

In summing up, I wish to say that the writing of this article will have been worth while, if I have been instrumental in bringing to the hospital authorities generally some plans and literature whereby appropriate music for our modern hospitals become a reality and many of them find some of the carols, anthems, or cantatas possible of presentation within their own ranks. If I have failed to meet your particular need, a letter addressed to me in care of THE MODERN HOSPITAL, will be given careful attention.

I wish all the readers of this article, and all the shut-ins everywhere, the Yuletide Greetings for nineteen hundred nineteen, and may the message of the "Messiah" bring peace and good will to all mankind.

Fig. 1. Mercy Hospital, Springfield, Mass.

FROM OUR FIELD EDITORS' NOTEBOOKS

New Pathological Laboratory at Mercy Hospital, Springfield, Mass. Completely Modern —A Hospital Which Offers Its Nurses a Liberal Education

The Mercy Hospital, Springfield, Mass.

The Mercy Hospital, Springfield, Mass., was established in 1896, in a commodious brick building. But the capacity did not exceed twenty-five patients, and within two years plans were completed for the erection of a modern hospital of 100 beds.

The management of the Mercy Hospital was given to the Sisters of Providence, who also conduct the St. Vincent Hospital, Worcester, Mass.; the Providence Hospital at Holyoke, Mass.; the Farren Memorial Hospital, near Greenfield, and the Boylan Memorial at Pittsfield, Mass.

The Mercy Hospital passed from its temporary quarters to its present building in 1900, and has rapidly developed, as its service shows. In its first year it treated 400 patients, and its last report, for 1918, shows that nearly 5,000 patients passed through its service. Its growth has been well-balanced, as can readily be seen in its group of separate buildings.

The medical and surgical patients are treated in the main hospital. Twelve years ago a very commodious building was erected, especially for maternity patients and children. The laboratory and laundry, with central heating-plant, are also separate buildings, well removed from the hospital. The Sisters and pupil nurses also have their separate quarters.

In the x-ray department, one of the Sisters of Providence does the work, under the direction of the doctor in charge. The pharmacy is in the care of one of the Sisters, who is a registered pharmacist; two of the Sisters, as trained technicians, are employed in the hospital laboratory. The Training School of sixty pupil nurses is conducted by one of the Sisters, and every department of the hospital, including the surgery, is superintended by Sisters, who are also trained nurses, many of them of long experience.

The maternity department alone is in charge of a graduate nurse, who gives instructions to the pupils in that special work. The anesthetic used is ether, and is administered by one or more of the Sisters, as occasion may require. The hospital has a visiting staff of physicians, surgeons, and assistants. The surgical service is limited to its surgeon-in-chief, surgeon, and assistant surgeons, but the medical and obstetrical departments are open to all physicians in good standing.

The Mercy Hospital has had for many years a complete equipment, with one exception. This want has been recently supplied in the addition of a pathological laboratory, where the work of the Mercy Hospital, and also the pathological work of the other hospitals conducted by the Sisters of Providence, is to be done. The new laboratory consists of a two-story building. On the first floor are two rooms—one for animals, and the other for performing autopsies. The entire second floor of five rooms is the laboratory proper.

Fig.2. Pathological laboratory, Mercy Hospital, Springfield, Mass.

One large room on the northwest, with the entire north wall practically all window, is the general laboratory, with complete apparatus for Wassermann work, histopathology, and special research work. A smaller adjoining room, with the north light, is for bacteriology, and contains thermostats and drying oven. A room adjoining this on the southeast is for clinical analysis. This room has a gas-hood, water-bath, and drying-oven. Another room on the south side of the building is for media making, and contains a Stoke's distilling apparatus, autoclave, sterilizer and inspissator. The office and record room is in the northeast corner. These rooms are equipped with the indirect electric lighting system, the latest models of electric laboratory apparatus, and are in every respect as up-to-date as it is possible to make a modern hospital laboratory.

The laboratory is now equipped and ready to perform any kind of examination or test likely to arise in the diagnosis and treatment of hospital cases, including pathology, bacteriology, serology, chemistry, and many special tests. The work in the laboratory is under the direction of J. E. Dwyer, Jr., M. D., who has had eight years' laboratory experience, and recently of the Medical Corps, U. S. Army, stationed at the Army Medical School, Washington, D. C., where he was in charge of the pathological and serological laboratories for several months.

Research Hospital, Kansas City, Mo.

The setting aside of an entire building for the care of free patients is one of the numerous aims of the Research Hospital, Kansas City, Mo., and its hope is that the time

Fig. 3. Research Hospital, Kansas City, Mo.

will come when no pay patients will be received; when by the aid secured through bequests and endowments, none but free service to the poor will be given. The hospital is an eleemosynary association consisting of about five hundred members, all contributors, none receivers.

Among the progressive movements inaugurated during the past year is the publication of the *Research Hospital News*. The purpose of the publication is to acquaint the members and other friends of the institution with its aims, its facilities and its actual workings. It will be published at intervals, possibly monthly, and will contain pertinent information for all interested in hospital or charity work.

Another noteworthy new feature is an out-patient department opened on August 1 for service to the public. It is operated neither as a charity nor for profit. A small charge is made, and persons of means are not admitted. It is for ambulatory patients who can come and be examined, take treatment and leave. Medicine is furnished at actual cost. A service worker visits the patients from time to time. If treatments are necessary, the hospital insists that they be taken, for its object is to cure, not merely give temporary relief. Surgeons and doctors of the hospital staff donate their services.

A substantial beginning has also been made toward the establishment of a fund for a nurses' home. At present, they occupy three and one-half floors of one of the buildings erected some time ago. The home will be large enough to house the Women's Auxiliary which needs sewing and committee rooms and an auditorium.

Hackley Hospital, Muskegon, Mich.

Hackley Hospital is rather exceptional among small community institutions both in what it owes to good fortune and in what it owes to the efforts of its trustees,

Hackley Hospital, Muskegon, Mich., an ideal small hospital.

staff, and superintendent. The liberality of its founder, Charles H. Hackley, gave it spacious and beautiful grounds, attractive buildings, ample equipment, and a generous endowment. It has something else which few hospitals of its size possess, which many much larger lack, yet which is within the reach of any hospital that has sufficient enlightenment, courage, and determination embodied in its governing board, superintendent, and its medical men. This is an active and efficiently organized medical staff, which does not merely use the hospital as a convenient repository for patients, but which gives the time and trouble necessary to maintain the standards of the institution.

I was glad to have seen Hackley Hospital when it had been without an intern for some time, for the medical records of this institution, written since the war, when interns have been unobtainable, effectually dispose of the theory that it is impossible to secure histories in a hospital which has no intern. Some of the histories are good and some are poor, but every man must be responsible for the history of his own patient, and, except in cases of absolute urgency, no operation can be performed unless a history has been prepared by the attending surgeon and O K'd by the head of the department. So far as the surgeons are concerned, moreover, there is an incentive for writing good histories in the fact that all who are not members of the American College of Surgeons will be candidates for membership as soon as they become eligible.

There seems no doubt in the minds of those with whom I talked that any hospital which has the requisite moral qualities can organize its staff as Hackley Hospital has done, no matter how small the institution or the community. "But," said one of the staff members, "don't put it to a vote of the staff, or you never will put it over." Until the benefits of efficient organization have been demonstrated, a majority of the staff is sure to oppose. The vote to-day, however, would, it is believed, show the staff of Hackley Hospital firmly convinced of the value of their staff organization, to themselves as well as to the hospital.

The MODERN HOSPITAL

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The Minimum Standard of The American College of Surgeons

The superintendent, the staff, and the trustees are willing and even eager to make their maximum effort for any patient in the hospital. That fact is true in almost every hospital on this continent. But do the superintendent, the staff, and the trustees coordinate their efforts so that every patient really gets the benefit of their combined energy and intelligence? In the terms of the stock market, that question is "prime stuff"; and it is just this question which the American College of Surgeons asks. The "Minimum Standard" penetrates through the complexities and reaches the heart of the matter. It is undebatable and is, probably, the most vital document which has come to hospitals in many years. Any hospital which does not meet that standard today has work to do. The standard is as follows:

1. That physicians and surgeons privileged to practice in the hospital be organized as a definite group or staff. Such organization has nothing to do with the question as to whether the hospital is "open" or "closed"; nor need it affect the various existing types of staff organization. The word staff is here defined as the group of doctors who practice in the hospital, inclusive of all groups such as the "regular staff," the "visiting staff," and the "associate staff."

2. That membership upon the staff be restricted to physicians and surgeons who are (a) competent in their respective fields and (b) worthy in character and in matters of professional ethics; that in this latter connection the practice of the division of fees, under any guise whatever, be prohibited.

3. That the staff initiate and, with the approval of the governing board of the hospital, adopt rules, regulations, and policies governing the professional work of the hospital; that these rules, regulations, and policies, specifically provide:

(a) That staff meetings be held at least once each month. (In large hospitals the departments may choose to meet separately.)

(b) That the staff review and analyze at regular intervals the clinical experience of the staff in the various departments of the hospital, such as medicine, surgery, and obstetrics; the clinical records of patients, free and pay, to be the basis for such review and analyses.

4. That accurate and complete case records be written for all patients and filed in an accessible manner in the hospital, a complete case record being one, except in an emergency, which includes the personal history; the physical examination with clinical, pathological, and x-ray findings when indicated; the working diagnosis; the treatment, medical and surgical; the medical progress; the condition on discharge with final diagnosis, and, in case of death, the autopsy findings when available.

5. That clinical laboratory facilities be available for the study, diagnoses, and treatment of patients, these facilities to include at least chemical, bacteriological, serological, histological, radiographic, and fluoroscopic service in charge of trained technicians.

A Revolution in Hospital Practice

The welfare of hospital patients depends chiefly on three external factors; first, the food, drink, and medicines which enter the body by way of the mouth and stomach; second, the knife of the surgeon and other solid objects, which enter the body through artificial openings made for special purposes or else accidentally; and third, the air which enters through nose and lungs. Which of the three is most important it would be impossible to say, yet during the past century the first two have received almost unlimited attention while the third has been comparatively neglected. Our knowledge of diet and of the use of drugs is a hundred-fold greater now than at the beginning of the last century, and is growing by leaps and bounds, as may be judged by the innumerable articles appearing in scores of publications. The

same is true of surgery since the discovery of antisepsis has made it possible for the surgeon to insert his healing knife into almost any part of the body without carrying with it the bacteria which formerly baffled his every effort. But how much change has there been in the air breathed by our patients, and what proportion of the articles in our medical journals bear on this vital subject? That much good work has been done and that progress has been made, no one will deny. Yet, after all, the practice in our best hospitals to-day is scarcely different from that of the best physicians a century ago.

The reason for our backwardness in the great art of controlling the air is not far to seek. In the first place, the air comes to us ready prepared, and, therefore, we think little about its composition. It is as if the dietitian had nothing to do except take prepared foods and warm them up. In the second place, the harm done by improper air is not definitely localized, and hence does not force itself upon the attention as do the ills which are treated by surgery. A feeling of lassitude or a mild headache is probably a more serious and certainly a far more common complaint than a slight cut or other wound. Yet the wound receives instant attention, while the headache is accepted year after year as if it were inevitable. In the third place, the harmful effects of improper air are not appreciated because they have never been subjected to any such minute study as has been given to medicine, diet, and surgery. While everyone knows that bad air is detrimental, we have very few data as to the percentage by which certain types of air increase the death rate. What little we know in this respect pertains chiefly to extremely bad conditions such as prevail in mines or factories, and not to ordinary houses, workshops, schools, offices, and sick rooms. If the harm done by bad air were once fully appreciated, a great and speedy reform would ensue, for it is far easier to provide proper air than to prepare proper food and drugs, and carry out skillful surgery. For these reasons the work of Dr. Ellsworth Huntington has already been discussed in these pages and deserves fuller mention. He is engaged in a comprehensive statistical study of the effect of different kinds of air, and the results are extremely interesting. In addition to his work on diseases in general he has just published two articles in *Modern Medicine* which deal with the specific problem of the effect of the air upon the success of operations. Taking the deaths after operations at the Boston City Hospital for five years and the Massachusetts General Hospital for ten years, he analyzes them in respect to the condition of the air at the time of the operation and at the time of death. The first and most striking conclusion is that the condition of the air immediately after the operation exerts an influence which can be plainly detected in the death rate for at least ten days. Since the temperature, although almost invariably too high, is fairly well regulated in all sick rooms, the most vital factor is humidity. For all temperatures below the optimum, that is, below 64° F., the air should be as moist as possible, provided there is no actual condensation. In actual practice a room temperature of 65 and a relative humidity of 75 to 80 per cent is essentially correct. At higher temper-

Peace on Earth, Good-Will to Men!

PEACE on earth, good-will to men! Once again adown the path of years echoes the old familiar strain of Yuletide, carrying us back over the centuries to the little town of Bethlehem and the radiant wonder of that first Christmas Eve. And is it not well, perhaps, that we pause for a time in our tasks and list again to the angel song which broke the starry stillness of that memorable night? Do not the quaintly simple words carry a message of much import at this time for a strife-riven world so sadly weighted down with the woes of reconstruction? Well may we hope to find in their lesson of tolerance and kindness a panacea for the evils which a war of blood and selfish greed has left in its wake. And in the trail of light shining down from the Star of Bethlehem may we well expect to glimpse that clarity of vision—that broadness of sympathy—which alone will help us to solve the problems of this soul-testing era. The spirit of kindly consideration for our fellowman, breathed to us in this first Christmas greeting, must be rekindled and live again in the new day of greater righteousness. This year, then, as never before, let us attach to the old words a true sincerity, and fling the glad Christmas tidings across the earth with a new and deeper significance—a reality that has long been lacking—"Peace on earth, good-will to men!"

atures there is a marked change, and very damp air becomes decidedly harmful. In fact, high temperature and high humidity are the worst possible conditions for operations, and the deaths under such circumstances are about three times the normal. Yet this does not mean that extreme dryness is valuable, for under such conditions also the death rate jumps to two or three times the normal. With a room temperature of about 75°F, the relative humidity should be in the neighborhood of 50 per cent, but for the best results the operating rooms and wards ought to be cooled in summer just as they are warmed in winter. Huntington's figures show that if the optimum degree of humidity prevailed during the day after operations at all seasons the death rate for such cases would be reduced by about 20 per cent.

This, however, considers only a single day. A further study of the deaths in Boston hospitals shows that the humidity on the day of death has almost as much effect as on the day of the operation. At that time, however, the need for humidity is not quite so great, and an average of about 60 per cent at a temperature of 65 is correct. What is needed then is obviously a humidity of 80 per cent or even more at the time of the operation, and a gradual reduction during the next two or three days to an average of about 60 per cent, both of which figures are far higher than the ordinary condition of the winter air even in the best hospitals. Theoretically, the condition of the air on the day of the operation makes a difference of 20 per cent in the death rate, while the condition on the day of death is almost equally efficacious. The intervening days must also produce some effect, so that it seems well within bounds to hope that an actual gain of 20 per cent in the success of operations may result when we provide our operating rooms and wards with just the right kind of air at each stage in a patient's progress. This hope is rendered brighter by the fact that not only can there be marked improvement in temperature and humidity, but in the variability of the air. Dr. Huntington finds that, except when the effect of variability is nullified by extremes in temperature and humidity, the operations performed on days when the temperature changes by 9 degrees or more from 8 a.m. of one day to the same hour the next day are again about 20 per cent more successful than the average, and something like 30 per cent more successful than those performed when the temperature from one day to the next varies less than 3 degrees. The variations in outside temperature are at once conveyed indoors partly by their effect on humidity and partly by the effect of the wind, which usually accompanies temperature changes, and thus renders the indoor temperature variable.

Variability of temperature is important on the day of death as well as on the day of the operation, but not to so great a degree. Apparently patients who are in a decline after an operation can not stand such great changes as those who are stronger. The ideal practice would thus seem to be to make the temperature of the rooms quite variable at first after an operation, provided the patient can stand it; that is, open the windows at frequent intervals and thus cause the temperature to fluctuate two or three degrees on either side of the optimum, 64°. At the first sign of chill, however, or if the patient grows weaker, the variability should become less. As a matter of fact, however, it will probably be found that proper temperature, proper humidity, and proper variability will so stimulate and strengthen the patients that many who would otherwise grow weak and ultimately succumb would improve steadily. The hospitals which practice intelligent air control and the physicians who insist upon it are sure to gain high reputations for their success in operations.

Hospitals and the Community, Yesterday and To-day

A very interesting milestone on the road of hospital progress is "Hospitals, Their History, Organization, and Construction," by Dr. W. Gill Wylie, published in 1876 as the Boylston prize essay of Harvard University for that year. This was forty-three years ago and twenty years after the Crimean War. Just what those two intervals mean to us to-day may be judged by reading a few extracts from Doctor Wylie's little book. After a brief review of the history of hospitals throughout the ages, he takes up the principles governing the relation of hospitals to the community. "Every time an individual is removed from his home—be that home never so humble—and taken to a hospital, the family as an institution receives a blow. Then, too, except to those already degraded, life in a pauper hospital [it must be remembered that even so short a time ago as 1876 a public hospital was necessarily a "pauper" hospital], especially with the young, is hardening to the feelings, while in many cases it subjects the moral to the influence of the immoral. Another objection to hospitals is the bad sanitary condition of many of them, and, unless this is improved, . . . it will be decidedly better, *on sanitary grounds alone,* [italics the author's], to treat in their homes all the sick poor who have homes, even

though they may be very bad and unhealthy places to live in."

Hospitals, Doctor Wylie concedes, are necessary, to meet certain deplorable contingencies, such as war, epidemics, accidents, and casualties, homeless pauperism, and, "on account of the difficulty in making suitable provision for the insane in private houses," insanity. In short, "civilization has not reached that stage of perfection in which hospitals can be dispensed with." Since "to avoid the injurious moral effects of hospitals on the characters of the inmates, and to prevent such bad sanitary conditions in hospitals as are sure to result in prolonged cures, and often in the generation of fatal hospital diseases, it is necessary to have hospitals constructed and managed in accordance with the teachings of social and sanitary science," the rest of Doctor Wylie's little book is devoted to showing the application of sanitary science to the subject.

Now, this is not the quaint pessimism of a superannuated conservative. Doctor Wylie is clearly, for his day, an enlightened man, whose comments in many cases show much discrimination and insight. Of course, he shares in the prevailing views of the period, as, for instance, the belief in floating infectious germs and the saturation of walls with "the poison of disease." His suggestions for avoiding the necessity of recourse to hospitals are most sensible, and very far in advance of the times: "(1) Do all that can be done to enlighten the poor to help themselves and to avoid the causes of disease. (2) Give indirect help by improving the condition of the poor, by strict laws in regard to the existing condition and the building of all dwelling houses, manufactories, schools, etc., and in regard to the sale of food, etc." As for his strictures on hospitals, they are evidently the result, not of prejudice, but of tragic experience. Doctor Wylie says that while on duty as house surgeon in the wards of Bellevue Hospital, he saw "patients" die from septic diseases contracted in the wards after the slightest surgical operations or injuries. From 40 to 60 per cent of all amputations of limbs proved fatal; and I saw a strong, healthy man die from pyaemia following an amputation of a great toe." The twelfth annual report (1872) showed one death in every 6.8 cases; of the women delivered in the hospital, one in every 11.3 died of puerperal fever. At the time Doctor Wylie wrote, conditions had been much improved by "the introduction of trained nurses, the removal of the lying-in patients, the reduction of the number of beds from eight to six hundred, and the use of Lister's antiseptic dressings," but one can scarcely blame him if a lively recollection of recent horrors caused him to prefer the worst home to the best hospital, and to advocate hospital reform, not with the wild, visionary hope of making a hospital a place conducive to recovery, but merely with the sober, practical aim of eliminating the worst of its abominations. Some of his suggestions are worth reading for their sound common sense, and others (for instance, his plan of a "hut" for the performance of the dread operation of ovariotomy) as antiquarian curiosities.

We have cited the book, however, merely as a mark to show how far the world has traveled since 1876. The word "hospital" has such a different connotation now that argument over Doctor Wylie's theses would be wasted breath.

A real hospital to-day is immeasurably better, not merely than the worst home, but than the best home, as a place for the care and treatment of any case of serious illness. The family as an institution has miraculously survived the assaults of the hospital on its integrity, and, by a happy coincidence, the moral evils which enveloped the hospital seem to have vanished unnoticed while its physical regeneration was being accomplished. The well-to-do seek hospital care as a luxury even in a comparatively slight illness; the progressive community endeavors to place hospital facilities at the service of the poor in all suitable cases, as a measure of insurance against the pauperism bred of disabling illness. It does more than that: it seeks to educate the ignorant poor in the uses of the hospital, just as it seeks to educate them in personal and domestic hygiene.

Yet, while our point of view with regard to the hospital itself and its relation to the community has been revolutionized, while we have made greater advances in the principles of hospital sanitation and organization during the past seven decades than during the previous seven centuries, we have very inadequate standards for judging the quantitative relations of hospitals to their communities. What are adequate hospital facilities in any given community? The question is not one of population and morbidity alone; it is complicated by social, industrial, financial, and even religious factors, as well as by questions of transportation and of public and domestic hygiene. Studies of the subject would be exceedingly instructive. We could wish that, as suggested in the second article of Miss Chapin's series (page 455, this issue), a number of enlightened communities would make studies of their own hospital needs somewhat on the plan of those made for certain New York communities by

the New York State Charities Aid Association. They would thus make a real contribution to hospital progress.

Motion Pictures for Hospital Publicity

The trustees of hospitals that derive support either wholly or in part from private contributions would do well to investigate the financial possibilities of the motion picture as a channel through which to acquaint the public of the hospital's needs, its various functions, and the meritorious work which it is doing for the welfare and health of the community.

On another page of this issue,[1] Dr. H. J. Moss relates his personal experience with motion pictures as a medium of institutional publicity. The successful experience of the Jewish Health Bureau of Baltimore, Md., with "movies" during a health campaign last April has prompted another city to repeat the campaign.

The Hebrew Hospital of Baltimore is using motion pictures for the purpose of obtaining a larger class of probationers in its training school. The manner in which films are employed in arousing the interest of young women in the career offered them is suggestive of how the cinematographer would employ his camera to exhibit the interior and environment of the hospital on the screen. Pictures were taken of the nurses' home showing the conditions under which the nurses in training live and work. These films are being shown in theaters in various neighborhoods.

Commercial organizations and civic bodies, associations, propagandists, and universities have utilized the films with considerable success. There are firms who engage solely in the business of producing motion pictures of institutions, factories, and activities of all descriptions for advertising or other uses. Hospital trustees and superintendents should consider the advantages of motion picture publicity for their institution before commencing a drive for funds.

On page 497 in his article on "The Motion Picture a Useful Means for Institutional Publicity," Doctor Moss writes:

"Our third experience with the motion picture, and the one which will interest you most of all, was the photoplay especially prepared for the fiftieth anniversary of the founding of the Hebrew Hospital of Baltimore. The celebration took place in May in one of our largest theaters, the object being to acquaint the people with the work of the hospital and to review the institution's progress during the past half century. Recognizing the impossibility of bringing to the hospital three thousand people to see our activities, we were enabled to bring the institution to the theater through the medium of the "movie." That it was an immediate success goes without saying. Many in the audience never realized that the hospital was rendering such invaluable service to the poor and needy of our community. Although the object of the celebration at this time was not for the purpose of raising funds, nevertheless we hope to use this picture in a campaign in the near future to further the development and extension of the hospital."

1. Moss, H. J.: The Motion Picture a Useful Means of Institutional Publicity, page 497.

State of Ohio Investigates Its Hospital and Medical Service

Frightful as was the loss suffered by this country from the 1918 influenza epidemic, it nevertheless gave birth to several isolated instances of great good. One of these instances is a resolution adopted by the Eighty-third General Assembly, 1919, of Ohio, calling for an investigation of hospital and dispensary facilities of the state and their public relation. This resolution was the direct result of the inadequacy of hospital and dispensary facilities revealed by the epidemic.

This same General Assembly also passed an Act, based upon the recommendations of a commission appointed in 1917 by the Governor of Ohio, to investigate the various phases of medical service in the state.

Under the resolution and the Act, these two investigations devolve upon the Ohio State Department of Health, which feels that the legislation was intended to provide a tangible basis, and offer the means, for a thorough study of the hospitals and dispensaries of the state for the mutual promotion of public and hospital interests. In meeting the obligations imposed by the Act, this conception is guiding the department, which fully appreciates the necessity of securing the assistance and good will of those primarily interested in these institutions.

In enacting this legislation, Ohio has set a notable example which other states may wisely emulate. Generally speaking, hospital and dispensary growth has been of a higgledy-piggledy character with little or no state supervision, much less control. So little consideration has been given to this important development that in most instances states do not even have in the files of any of their departments, dependable and comprehensible statistics as to the number of hospitals and dispensaries within their confines, their character, capacity, and control. This situation is lamentable and should be speedily corrected.

The health of its inhabitants is one of the principal concerns of the state. Its health department should be ably manned and adequately financed. Scarcely less important, however, is a knowledge on its part of what public and private medical institutions exist within its limits and what they are doing as the basis of intelligent supervision and necessary development.

Resume Department on Venereal Disease

We count ourselves fortunate in being able to announce that the department formerly conducted under the title of "Social Hygiene and Venereal Diseases," by Dr. William H. Snow, secretary of the American Social Hygiene Association, will be resumed with the January, 1920, issue under the title of "Venereal Diseases and the Hospital." The department was temporarily suspended because Doctor Snow and practically his entire staff in the American Social Hygiene Association enlisted for war service.

We are glad to make this announcement because we believe that this country has already entered upon a campaign against venereal diseases, the scope and importance of which will not be unlike the campaign which has been waged during the past decade against tuberculosis.

In this campaign hospitals and dispensaries must take a prominent part, and it will be the aim of this department to bring before its readers such concrete, practical information as only the experts of the American Social Hygiene Association, who are in close and constant touch with the movement throughout the country, can give.

In the January issue, the department will be devoted largely to a general presentation of the subject, indicating the relation of hospitals and dispensaries to the campaign against venereal diseases in their communities.

Succeeding articles will deal with the need of hospital beds and their probable cost; types of cases to be hospitalized; a standardized record system including a discussion of proper forms, follow-up systems, indexing, and statistics; the dispensary layout as it relates itself to floor space, equipment, nursing staff and orderly service.

The series will include a discussion of the difference between quarantine, detention, involuntary and actual bedridden types of patients; the different problems involved in the management of these groups, and finally, the important subject of costs which, while running more or less through all the discussions, will be dealt with in a separate article.

Hospital superintendents who have already established a venereal disease service in their institutions, and those who contemplate doing so, will find it eminently worth while to follow this department during the coming year.

Mr. Asa S. Bacon to Edit Department

For several years, in fact, since THE MODERN HOSPITAL was started, the Department of New Instruments and Equipment has served a valuable purpose. We feel, however, that this department can be made far more helpful to our constituents if it be more broadly conceived. Consequently, with the January issue, its scope will be enlarged to include not only new instruments and other technical hospital equipment, but also the practical equipment of the hospital, and the countless methods of economy, both small and great, which can be adopted by efficient, wide-awake hospital executives.

We are gratified in being able to secure Mr. Asa S. Bacon, superintendent, Presbyterian Hospital, Chicago, as editor of this department. Mr. Bacon has contributed exceedingly helpful articles to our columns from time to time, and, of course, needs no introduction to our readers.

Much of the value of this department will depend upon the sympathetic, whole-hearted cooperation which our readers give Mr. Bacon in sending in brief descriptions, with illustrations wherever possible, of new devices that have proved their worth, or of methods of economy and efficiency which they have inaugurated.

Good Things in Store for 1920

Those who are interested in the problem of reconstruction through occupational therapy will look forward with keen interest to an article shortly to be published on "Mental Construction and Reconstruction Through Occupational Therapy," by Miss Meta L. Anderson, supervisor of the Binet Classes of the Public Schools at Newark, N. J., and during the war head reconstruction aide, Base Hospital 214, A.E.F., Savenay, France. She is at present on leave of absence as chief of the Vocational and Industrial Division of the Serbian Relief Committee of America with headquarters at Cacak, Serbia. Miss Anderson writes with the authority of one who has had an unusually varied experience in this potential and growing field.

The nurses of our hospitals particularly will welcome a unique series of articles which will run through the first six issues of 1920 on the recreation and entertainment of children in the hospital. The articles, which will be attractively illustrated, will include the construction of hand-

work for convalescent children and the psychology of diversion, toys made from newspapers and paper bags, clay modeling, the paper doll and her wall paper wardrobe, dolls for everyone and every kind of doll, and what to read to sick children. The author of these articles, Mrs. Mary A. Barker, director of the Kindergarten Department of the Public Schools of Worcester, Mass., has lectured to the nurses of the Worcester City Hospital for many years on this fascinating topic, and is well qualified to present in an interesting way what in itself is an interesting subject.

Through the good offices of our friends, Dr. John O'Grady, of the Committee on Reconstruction of the National Catholic War Council, and associate professor of sociology, Catholic University, Washington, D. C., each of the six numbers of the fourteenth volume of THE MODERN HOSPITAL, running from January to June, 1920, will contain an article on some of the principal Catholic hospitals of the country. Stimulated by the American College of Surgeons and the Committee on Reconstruction, many of the Catholic hospitals in this country are fast forging to the forefront of hospital progress. It is with pleasure that we announce this series.

American Public Health Association Elects Southerner

WILLIAM S. RANKIN, president, American Public Health Association.

Watson Smith Rankin, recently elected president of the American Public Health Association, is a specialist in public health work. He was born in Mooresville, N. C., in 1879, and attended the high schools of this town and Statesville, N. C., prior to taking up the study of medicine at the North Carolina Medical College, Davidson College, and the Medical College of the University of Maryland.

Following his graduation, he served as intern in the University of Maryland Hospital for eighteen months, afterwards taking a year's postgraduate work at the Johns Hopkins Medical School. Upon completing his postgraduate work, he spent six months as resident physician in the Obstetrical Hospital of the University of Maryland. During the succeeding thirteen months he served as resident pathologist in the University Hospital at Baltimore. For a time he was pathologist in the Medical Department of Wake Forest College, Wake Forest, N. C., and from 1905 until 1909 acted as dean of its School of Medicine. Doctor Rankin is a Trustee of the Wake Forest College and of the North Carolina Sanatorium for the Prevention of Tuberculosis. He is secretary of the North Carolina State Board of Health, and a member of several medical societies.

Lack of space forbids our writing at length about some of the other articles that will appear in the next volume. Among them, however, are these: "The Standardization of Hospital Records," by Genevieve Clark, Consultant in Case Records, San Francisco Hospital, Mt. Zion Hospital, St. Mary's Hospital, and Alameda County Hospital; "The Need for Public Health Knowledge Among Hospital Superintendents," by Miss I. R. Falconer, Vashon, Washington; The "Psychogram," a publication by the inmates of the New Jersey State Hospital for Insane, by Dr. George B. McMurray; "Health Problems Among the Wealthy Rural Population and How to Meet Them," by Esther E. Wicks, R.N., field nurse, Southwestern Minnesota Sanatorium, Worthington, Minn. A series of three articles on the Arroyo Sanatorium, Livermore, Cal., by Dr. Chesley Bush, Medical Director, Miss Olivia Lee Tiedebohl, supervisor of Occupational Therapy, and Mr. Henry H. Meyers, architect; "The Adventure Perilous—A Patient's Hospital Story," by Miss Helen A. Leonard; and "The Relative Value of Hospital and Home Isolation of Infectious Diseases," by Dr. D. L. Richardson, superintendent, Providence City Hospital, Providence, R. I.

SOLDIERS IN FRENCH HOSPITAL CELEBRATE PEACE CHRISTMAS

Wounded Men of Three Nationalities Join in Festivities—Doctors and Nurses Sing Christmas Carols and National Anthems—American Major Plays Role of Santa Claus

By MARGARET J. ROBINSON, R.N., Superintendent, Department of Hospitals, Dallas, Texas

Hôpital Complementaire No. 2 was in Normandy, in the land of romance and history, where the women wear the quaint little embroidered caps, and make the creamy Camembert cheese.

The head nurse was seated in her office. She was trying to write a letter to a woman in Ohio whose boy had died in one of the wards the night before, after a brave fight with wounds received in the last big drive. She always made a point of writing these letters herself, although it was the hardest part of her job, she said. But it was up to her to do it, and she wouldn't have parted with the "thank-you" letters she had received from home for all the gold napoleons the old Norman peasants had hidden away in their cellars and strong boxes.

Hôpital No. 2 was a mixture. At first there had been only French there, and the American Red Cross had helped by sending American doctors and nurses and supplies. Then when the big drives were on, British soldiers, and later American boys, began to come until it seemed that every nook and cranny of the place had a cot and a man in it.

A knock came at the door, and the head nurse said, "*Entrez.*" This usually saved time, because if the one who knocked was French he understood, and even the English and Americans knew that much French too. A most charming, homely girl in spectacles entered. She wore a gray Red Cross uniform with two maroon cloth stripes on her coat lapels, and another maroon strip around the crown of her unbecoming soft, gray hat. Her costume showed that she was a Red Cross social worker —one of those useful women who do a little of everything. They wash dirty refugee babies, they help in the dispensaries, they write letters for boys who cannot write themselves, or they get up stunts to chase away the blues from hospitals.

"To-morrow is Christmas, and what are we going to do?" she began. "The boys are mostly French, but there are a lot of Americans, too, and some Tommies. The French keep Christmas only as a religious holiday, and they give presents and make all the fuss on New Year's day. But if we do want to get up something, have we anything to do it with?"

"Of course we are going to have a Christmas," said the head nurse, swinging around as if she were on a swivel chair instead of one made from a packing case. "Our boys and the Tommies know what a good old-fashioned Christmas is, and I know that those blessed *poilus* will love it too. Do you remember the consignment of hard candy we were to have received for Christmas, 1917? It didn't come until April. Just about then, the *boches* started again, and we were too busy from then on to bother about candy. I tried some of it today and it is fine, so why should it not do its duty for Christmas, 1918?

"The woods about here are full of holly and mistletoe and flowering laurel. Last night two Knights of Columbus men came in here and left a lot of cigarettes and chocolate; and, last but not least, the *camion* that went up to Paris this morning for medical supplies and splints carried a sweet little note from me to a man at headquarters gently insinuating that we had 500 men here, not to mention a batch of doctors and nurses and other folks who are far away from home. And I know him well enough to know that the *camion* will bring back something else besides the splints and medical supplies."

"They surely do not need any social workers where you

Fig. 1. French, British, and American wounded celebrating Christmas in a French hospital.

are," said the girl with the maroon stripes a little grudgingly, "and what next?"

"Jean Pierre and Phillipe le Grand have been appointed officer orderlies of the day. They already have borrowed Mere Pentguin's donkey and cart and have gone to the woods for the decorations. One of the boys who used to be a tuner is struggling with the little parlor organ in the chapel. Miss Beans, the American Red Cross stenographer in the office, is making carbon copies of 'The

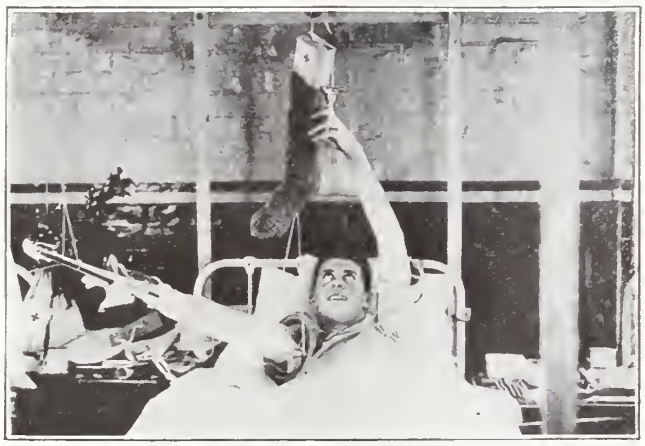


Fig. 2. This Christmas sock contains all manner of good things—with even its own mate tucked inside.

Holy Night,' and 'Carol, Brothers, Carol,' and 'Jingle Bells,' and we are all going to sing.

"I passed around the chief's overseas cap at the staff meeting last night, and have *beaucoup* francs for extras. Major Clarkson is going to be Santa Claus, otherwise Papa Noël, and we will all help to drive the blue homesickness as far away from here as we can, to-morrow."

When night came, the wards were blossoming with holly, mistletoe, flowering laurel, and yellow mimosa from the market stalls in the village. The *camion* had returned from Paris, loaded with many things besides medical supplies and splints, and long after the patients had settled down for the night, lights flashed in the staff dining-room and khaki and white-capped figures could be seen working over the long tables.

The head nurse, the night nurses, Jean Pierre, and Phillippe le Grand tiptoed about like Boche conspirators, and when morning came there appeared on each man's bed a wonderful stocking. Then came Papa Noël, marvelously clothed in the black boots of Captaine Marcelle of the artillery, a blue *poilu* coat, a red cape—which was the cape of the head nurse turned inside out for the occasion—the red cap of Shadi Alli, the colonial soldier from Tunis, a great mustache and a beard and bristling eyebrows made of cotton from the operating room.

"*Bon jour, mes enfants,*" said Papa Noël, in very good French. From his soldier's pack he brought chocolate and cigarettes, and then showed the men the contents of the bulging stockings that were tied to the beds. The stockings were woolen ones, with the mate of each one folded neatly inside the other. Each one had a shiny new 50 centime piece wrapped in a bit of paper in the toe, bags of nuts, candy, and cookies, a handkerchief, and a cake of soap.

While each one spread the contents out on his bed, or had a comrade with two good hands do it for him, the breakfast came. The same breakfast, but very different too, because in the *camion* had come extra cases of evaporated milk, and bags of cocoa just for Christmas. The night nurses had stayed on duty and made it themselves, and there was butter—think of it—butter for breakfast. A doctor and a steward had scoured the markets and farms for miles around in the little brown Ford to get it.

And so the happy day went on. There was a fine dinner for everybody, served as all good French dinners are, at 6:30 p. m. Then when they thought the wonderful day was over, from somewhere below came the sound of many voices singing.

"Listen," said Louis le Villiers. "The words are English, but it is our own *Minuit Crétien, Le Canticle de Noël,* that every French child knows as soon as he knows the sound of songs."

"Oh! Holy night, the stars are brightly shining.
"It is the night of the dear Savior's birth.
"Long lay the world, in sin and error pining,
"Till He appeared and the soul felt its worth.
"The King of kings lay thus in lowly manger,
"Through all our trials, born to be our friend."

And then rising clear above the rest, the voice of the young nurses—

"Fall on your knees, Oh! hear the angel voices—"

The whole staff was singing—doctors and nurses, office force and corps men—and the little old parlor organ from the chapel was carried along with them from floor to floor. Each one carried a lighted candle.

Those who were up and about lined the walls of the corridors and stood with wet eyes and applauded, while those who could not walk lay very still to listen. Louis le Villiers, who always laughed, although his body had been broken in many places, had to ask a comrade to wipe the little pools of water from the hollows of his eyes.

They sang "Over There," and "Jingle Bells," and the national anthems, and then the little parlor organ was carried out among the barracks and tents. The rain had stopped, and as the singers stood in the mud between

Fig. 3. No Christmas is ever complete without Santa Claus, and nowhere is he more welcome than in the hospital ward, where he brings a gift to every one.

the tents, and sang "The Holy Night" again, the moon came out high over the poplar trees and made a perfect end to a perfect day.

Truth is a rainfall that sinks thanklessly into the ground, yet rises later in universally acknowledged benefaction.—Stephen Berrien Stanton, "The Hidden Happiness."

CHRISTMAS FESTIVITIES AT LAKESIDE HOSPITAL, CLEVELAND

Nurses Delighted With New Furnishings for Living-Room—Christmas Carols Waken Patients at Four O'Clock—Nurses and Doctors Have Buffet Supper for Friends

By LULU ST. CLAIR, The Lakeside Hospital, Cleveland.

Lakeside Hospital has emphasized the Christmas spirit for several years in such a successful and far-reaching manner that the holiday season has proved a beautiful and happy memory for patients, nurses, doctors, and, in fact, everyone connected with the hospital. One who has not seen it can scarcely imagine the happiness displayed in an institution of this kind during the holiday season. The Christmas holidays were so delightful last year that when suggestions were asked for as to Christmas plans this year, our students in one accord said, "The arrangements for 1918 could not be improved upon."

The day preceding Christmas was a busy one. The entire hospital was decorated with holly, evergreen ropes, and red shaded lights, with small Christmas trees in every ward, as well as in the nurses' home, and maids' dormitory.

Christmas awakening begins earlier each year in the nurses' home, each nurse trying to rival the others in being the first to say "Merry Christmas." Last year two of the nurses, dressed as Santa Claus and his wife, awakened every nurse before 4 a. m. by the ringing of bells in each room of the dormitory. A half hour later found a chattering group of 125 nurses assembled, ready for carol singing throughout the hospital. This chorus, which was directed by Mr. Kraft, organist at Trinity Cathedral, had been practicing for several weeks preceding Christmas.

When the nurses assembled in the living room on Christmas morning, they found to their delight that the whole room had been transformed—new rugs, new hangings, lamp shades, table covers, and attractive, comfortable cushions. For two days, admission to the room had been barred, and they had tried in vain to appease their curiosity by peeping through door crevices and window shades. The carolers rather reluctantly left the inviting new room, and were soon singing, in a long procession which filed through the long corridors and wards of the hospital, and even down into the general kitchen where the cooks already were preparing breakfast. Nor was the maids' dormitory forgotten.

On each ward the singers found the patients waiting in eager anticipation, many of them joining in the songs. A small portable organ, which is always brought into use for this occasion, was easily carried from ward to ward. In order to offset any sadness which might result from the singing, it was arranged that Santa Claus should arrive immediately following the departure of the carolers. His pack was laden with presents which he distributed personally among the patients by name, calling forth much laughter and huge enjoyment.

Through the generosity of the board of managers, it was possible to provide a suitable gift for every employee and ward patient in the institution—the gifts numbering about 350. Great care was taken in making the selections, and articles of practical value were favored. One of the wholesale houses through which the hospital makes extensive purchases offered its best services. Only a few articles of each kind were purchased, which made a wide variety of gifts. These were placed on display in a secret room in the nurses' home several days before Christmas, where the heads of departments came with baskets to be filled. Students then made selections for their individual patients from the assortment selected by the head nurses, and finally each gift was wrapped in tissue paper, tied with green and red, and tagged with the future owner's name. Among the gifts for women last year were boudoir-caps, scarfs, bath towels, ties and collars, stockings, cups and saucers, hair brushes, handkerchiefs, toilet water, perfume, talcum powder, writing paper, and various other articles. For men there were socks, handkerchiefs, neckties, mufflers, belts, cuff buttons, pipes, suspenders, garters, mittens, pocket combs and purses.

The carolers returned to the nurses' home shortly after 6 a. m. where a bright fire in the fire-place and the presents from their Christmas tree awaited them. After a short dance to the music of the new talking machine, a gift to the nurses from the board of managers, they departed for breakfast.

At ten o'clock as many visitors as could be accommodated assembled in the children's ward for a peep at the arrival of Santa Claus with his sleigh packed with toys. Then how eagerly they talked with him and how happy they were as they received the identical articles of which they had written in their letters to him! Santa Claus was very generous to the children and many children probably experienced one of their happiest Christmases, in this ward.

The board of managers also provided a turkey dinner for everyone in the hospital, and the doctors did their utmost to permit each patient to enjoy it. In going about from patient to patient, it was surprising to find so much enthusiasm expressed among them. One foreign woman in her delight exclaimed, "Me new stockings—new collar—next year—me no die, me come back."

A rather unusual and pleasant feature of the festivities was the plan of a buffet supper in the living room of the nurses' home, to which the doctors and nurses' friends were invited. Three or four tea tables were spread, and music and stories were enjoyed before the burning fire. Dancing followed, which contributed a delightful homelike feature to the day.

The holiday week continued to be busy socially. So many nurses were far from home that it seemed that the home life should be made as pleasant as possible. To this end each class selected one evening in which it entertained all members of the school. One class gave a circus, another produced an original playlet, while still another offered a clever minstrel show. The nursing staff, too, contributed an evening, and the doctors as their share, gave an informal dance.

This year the board of managers has again provided funds, and the whole hospital is looking forward to another unusually happy Christmas.

Beyond the Ukase

The progress of an American Red Cross relief train was recently somewhat impeded while passing through the Balkan states by frequent collisions with cattle, which appeared to be wandering aimlessly about near the railroad track. After being awakened several times during one night the official in charge of the relief train started out on a tour of investigation, bent upon discovering if all the cows in Roumania were sleeping on the track.

Upon emerging from the train he found the carcass of a young bull lying by the track with tether ropes attached to his fore and hind legs and a peasant and the station master preparing to skin him.

The Red Cross worker called his Roumanian interpreter and demanded an explanation of the strange proceedings. He learned that the Roumanian government had passed

an edict forbidding the slaughter of live stock for one year. Since there was nothing in the ukase regarding accidental slaughter, these "accidents" were common occurrences in the country.

CHRISTMAS AT THE PENNSYLVANIA HOSPITAL

Make Extensive Preparations for Special Decorations, Entertainments and Gifts—Patients Enjoy Hearing Christmas Carols Sung—Gather in Assembly Hall to Greet Santa Claus

By DANIEL D. TEST, Superintendent, Pennsylvania Hospital, Philadelphia.

There is so much of distress and discouragement in the lives of our patients that every member of a hospital family should as far as possible make every day a day of cheer. Christmas time should be more than this. If we put aside all religious significance, it should still be the time when we make a supreme effort to bring joy to everyone about us—either as a climax to the year that is past or a rededication to the happiness of others for the year to come. How can we best do this?

Perhaps the practice at the Pennsylvania Hospital does not differ from the practice in other hospitals, but it will serve to bring the matter before us. To begin with, let me say that the expense for the Christmas celebration should not be met from the regular funds. Christmas always has an appeal and with a little effort sufficient funds will be especially provided.

At the Pennsylvania Hospital the Nursing Department, especially, begins to develop the Christmas spirit many days before the 25th of December. Entertainments are arranged, decorations are planned, presents are purchased, and the attractive serving of the all-important Christmas dinner is thought out to a nicety.

Nothing seems to add more to the cheerfulness of the day than Christmas greens, so an ample supply is provided—3,500 yards of laurel, 200 holly wreaths, several cases of loose holly branches, and the numerous decorations made from colored paper.

One coming to the Pennsylvania the day before Christmas will find nurses, doctors, orderlies, in fact everyone giving his or her spare moments to the decorations. A friendly rivalry in the various sections often produces surprisingly beautiful effects. In addition to the more general decorations, one section will have a charming artificial fireplace from which the red rays of the electric log add cheer to the scene. Another section will have an artistic Indian tepee which takes us back in thought to colonial days when the hospital was not infrequently called upon to admit patients who had been shot by the Indians. Still another section will have a gipsy camp where some one will take the role of the renowned fortune teller and hand out choice bits of the future to those who call during the entertainment of Christmas Day.

Each supervising nurse with her assistants plans the entire program for her section and each is given a certain amount of money to spend as she sees fit. This encourages initiative and calls out the best that the nurses have to give.

Also, a committee of women, who have charge of a library for the patients, come to the hospital the day before Christmas and with a small fund which they raise,

Fig. 1. The children's ward in the Pennsylvania Hospital is decorated and furnished with Christmas trees by a special committee of women.

they furnish and trim Christmas trees in the children's department and in the large assembly room, and give substantial presents and fruit to all the patients and many of the employees. Also the Women's Auxiliary of the Social Service Department provides baskets containing supplies for the Christmas dinner, and useful gifts and toys for poor families known to the department, who otherwise would have a dreary Christmas. These baskets are delivered by the women themselves and the warm handshake and the words of sympathy and cheer often mean more than the contents of the baskets.

Fig. 2. Christmas decorations, children's ward, Pennsylvania Hospital, Philadelphia.

It might seem that we have already had enough, but this is only the prelude to the real festival on Christmas Day. At five o'clock on Christmas morning a company of nearly a hundred persons consisting of nurses, doctors, managers, private patients, and others slowly march through the hospital singing Christmas carols. That this exercise is enjoyed by the patients is attested to by the fact that one of the captains of industry of Philadelphia who was very ill in the hospital at Christmas time, 1917, was so impressed with the singing that he left his home at four o'clock on Christmas morning, 1918, in order to be present and help give others the pleasure he had had. Also one of the managers of the hospital who lives in the country had enough interest in the occasion to spend the night in town in order to be on hand in the morning.

The patients are thus pleasantly wakened to find that Santa has visited them during the night and left all sorts of surprises for them. The presents are purchased with funds specially given for the purpose and are selected by a committee of the nurses. In this way the patients are made happy during the morning while members of the hospital family are preparing for the dinner which is of the good old-fashioned Christmas variety. Tables are set in all the wards where the condition of the patients permits. This is a joy not only to the patients who can sit at the table, but also to those who can look on from their beds. The turkeys are carved by the doctors, and the nurses, who have spared no pains in their preparations for the dinner, see that every one has a happy meal.

The climax of the day's entertainment is reached when at 2:30 p.m. the large assembly hall is filled with children and adults to witness the spectacular arrival of Santa Claus (one of the doctors) which delights the grown-ups as well as the children. The room, which has been decorated with appropriate Christmas scenes, is made dark and the Christmas tree lighted by variously colored electric lights, gives a happy setting to the scene. At this function the employees of the hospital are especially remembered. Those who have families are invited to bring their children, and even grand-children, and all under fifteen years of age are given presents. The patients in the children's ward who are able to walk or to be moved in wheel chairs also have a part. This occasion is often made very jolly by booby presents to the doctors and graduate nurses which illustrate some innocent joke or trait of character, care being used to exclude everything which might give pain or embarrassment. The hospital poet also has a happy chance.

The remainder of the afternoon is devoted to entertainments on the various wards, which usually take the form of musicals, afternoon teas, and visiting the gipsy fortune teller. Many of the friends of the hospital drop in during the day to take part in the exercises and the keen interest of the hospital family is shown by the fact that it is a rare thing for doctors or nurses to leave the hospital before the entertainment is over, even though they have the privilege of doing so, and employees who are off duty usually spend part of the day at the hospital. When evening comes we are tired but have the satisfaction of realizing that we have brought joy to others and in so doing have had the greater joy ourselves.

The Christmas celebration cannot be a success without the enthusiastic interest of the nursing department and much of the credit is due the superintendent of nurses and her corps of able assistants.

If any one thinks such an elaborate celebration is un-

wise from the medical point of view, let him consult the staff of the Pennsylvania Hospital, from whom no word of criticism has ever come. No instance of injury to a patient has ever been recorded. What matter is it if John Smith does have a slight temporary rise in temperature from an overflowing stomach, when his heart is made to overflow with the spirit of brotherhood which gives him new life and fresh courage for months to come. And if any one thinks that so much expenditure of money and effort is not justified, let him try it. The amount of money is not large and no one has ever regretted the giving of oneself for others. It is the best investment an individual or an institution can make and the dividends which it pays in good will and cooperation cannot be measured.

The only thing that can cure the ills of this old world to-day is the spirit of Christmas which is the spirit of unselfishness—the spirit of brotherhood, of service, and of sacrifice. As we are helping to reconstruct the health of those about us, why should we not in this way do our mite for the reconstruction of society by radiating that spirit which alone will bring permanent "peace on earth."

"GOOD-WILL" IN AN ARMY HOSPITAL

"Buddies" Touched by Christmas Spirit Do Their "Bit" Toward Brightening Sick Ward

The holiday season recalls to the minds of former service men their Christmas in the army, perhaps spent in an army hospital. The Christ spirit which permeates all lands during this season of the year is not lacking even in an army hospital. Some of these "buddies" had made up their minds that holidays held no joy for them, homeless as they all were—temporarily, at least—and many of them—as they thought—also friendless.

But being in the world, they were made to feel on Christmas morning that they were also of it when under kindly hands their ward blossomed forth in all its gala Christmas attire. Under the influence of the gay decorations and gifts for everybody, the buddies rose to the occasion and did their bit in smiles and song.

Several thousand wounded and sick doughboys will spend another Christmas in the hospital this year. The army hospitals are bustling with holiday preparations. Mothers, fathers, relatives, doctors, nurses, and laymen are helping to make Christmas a season of cheer for the convalescent fighting men.

DADDY TEN'S CHRISTMAS

Holiday Season Dawns With Cruel Disappointment for Aged Man—How He Deceives His Wife

By JESSIE CARGILL BEGG

The little old man with bandaged eyes in the end bed of the ward heard the cruel verdict in silence. Except for the tightening of his thin lips, and the faint flush that crept into his cheeks, there was nothing to make the house surgeon believe that the loss of Daddy's sight was the calamity it might have been to some patients.

He reflected as he stood at the bedside that the old man was over seventy and getting his pension.

His wife was nearing the same age, but a capable daughter earned sufficient money to keep them both in comparative comfort. It is true that Daddy had fully made up his mind that he would regain his sight after the operation. The doctors had warned him not to raise his hopes, as he might be disappointed, but Daddy refused to be anything but optimistic. He told the nurses that the bandages would be taken off on Christmas Day, so that he could see his wife.

The house surgeon found Daddy's silence distinctly disconcerting. He fidgeted with his stethoscope and vainly endeavored to think of something appropriate to say under the melancholy circumstances.

"I suppose you ought to be thankful that you have gotten to your age without this happening sooner," he remarked, brusquely.

"It'll cut up the old girl," quavered Daddy.

"She'll get over it," said the house surgeon soothingly.

"Bein' Christmas time, it'll be 'arder for 'er," persisted Daddy.

"Well, you try to be as cheerful as you can, and don't spoil Christmas for her," replied the doctor.

"It won't be no good when she gets to know as my sight's gone. I shouldn't wonder if she gets an 'eart attack right away."

"My advice to you is to keep the news from her till the next day, if you can. Then the bandages will be off."

He was gone before Daddy could frame a suitable reply.

But as the old man lay and pondered over the situation, he saw the wisdom of the advice.

He told Sister about it when she settled him up for the night.

"I just got to bluff 'er for once so as she can be 'appy on Christmas Day," he explained.

On the afternoon of Christmas Day, Daddy's wife came tottering up the ward to see him. Bent almost double with rheumatism and with a nervous jerk of the head that kept the little bead flowers in her bonnet in a constant state of tremor, Eliza looked a great deal older than she was. There was a great joy beaming out of her faded blue eyes.

She did not speak to Daddy Ten at first; she just sat and held his hand in hers in an ecstasy of happiness that needed no words.

It was Daddy who broke the silence. "You're lookin' ten years younger, mother."

"Oh, John! 'Ow much can you see of me, dearie?"

"All the best part of you, mother."

"I'll believe it when you tell me wot color my blouse is, lovey."

"Why green, of course," said Daddy, with a fear clutching at his heart.

She looked disappointed. "I'm too far away for you to see that it is blue, John." She stooped over him and Daddy touched her sleeve caressingly.

Then he gave a forced laugh. "'Ave you bin an' forgot as I'm color blind, mother?" he asked, softly.—*British Journal of Nursing.*

Importance of Good Health in Industrial World

In recent years many manufacturers have granted bonuses to employees for perfect attendance. A factory or store cannot have full attendance when epidemics, such as influenza, are raging throughout the country, and consequently efficiency is impaired and production decreased. When one remembers that in America more than half a million deaths resulted from influenza in less than two years, that several hundred thousand more were ill from three to twenty days, the effect on the industrial world can be realized.

Employers eager for increased production and employees anxious to reap the benefits of faithful attendance at work are alike interested in preventing a recurrence of influenza and equally deadly epidemics. Consequently the peace time program of the Red Cross, inaugurated November 2 to 11 with the Third Roll Call, had a direct appeal to the great industrial world. The program will be a systematic campaign for better health, for better living conditions to resist plagues and preventable diseases, for a lower death rate—in short, for "a healthier, happier America."

In this scheme the Public Health Nurse will have a vital part. Besides actual nursing there will be classes for factory girls and others in Home Hygiene and Nursing. Home Dietetics, dealing with the value of proper eating as a factor in the prevention of disease, will be taught by Red Cross dietitians. It is planned to offer these advantages to every possible community. The course in First Aid treatment, which so many firms have found invaluable in taking care of accidents among the workmen, will be continued.

In addition to promoting this widespread Public Health campaign funds from the November Roll Call will be used to complete Red Cross foreign obligations, to increase Home Service and to double the Red Cross capacity for service in time of public disaster.

THE MOTION PICTURE A MEANS FOR INSTITUTIONAL PUBLICITY*

Recognized As An Essential Educational Factor—Has No Equal As An Advertising Medium and Awakener of Public Opinion—Gives Ideas and Ideals of Life

By H. J. MOSS, M.D., Superintendent, Hebrew Hospital, Baltimore, Md.

Before presenting the motion pictures, which really speak for themselves, it is perhaps necessary that I pause a few moments for the proper introduction of the subject.

May I state at the start that this topic is not presented with the view of advertising any individual motion picture concern, nor to add materially to the income of the motion picture industry which has made such rapid and tremendous strides during the past few years, but rather to present for your consideration the possibilities offering themselves to institutions through the medium of the "movie," as a means of bringing the work of philanthropic institutions before the public eye.

It is needless for me to elaborate upon the part that the motion picture played in influencing public opinion and in giving to the "home folks" a clear idea of the issues and principles involved in the recent war. It is self-evident and requires no further comment. The administrators of our government, seeing the need of rapid intensive training of all recruits and knowing that fully 80 per cent of all human knowledge is acquired through the eye, used motion pictures and were themselves astonished at the results.

Coolies from the heart of China who were brought to France to do construction work back of the lines of combat, and who were ignorant of all things modern, were quickly taught "the modus operandi of modernity" by means of the motion picture. Motion pictures, the universal language, unlike words, do not require learning. Their meaning is comprehended by all, old and young, ignorant and wise. Moreover, the mental vision or horizon of those who see pictures is enlarged and perspective deficiencies are corrected. Even to the least intelligent they bring with lightning rapidity, homogeneous mental images.

About one-tenth of the entire population of the United States sees motion pictures every day. So compelling is the power of the motion picture that to men, women, and children it gives ideas and ideals of life. Aside from its entertaining qualities, the motion picture is now recognized as an essential educational factor by schools, colleges, churches, chautauquas, women's clubs, rural life, the Young Men's and Young Women's Christian Associations, in work of reconstruction of cities, Americanization, and industry in general.

As an advertising medium the motion picture has no equal. As it is a recognized fact that we do not forget things we see, but that we do forget what we read, many of the largest corporations in the country have resorted to advertising through the motion picture. In awakening public opinion it again proves its worth. I have had occa-

*Read before the Twenty-first Annual Convention of The American Hospital Association, Cincinnati, September 8-12, 1919.

sion during the past year to study the value of the motion picture on four different occasions, in the results of which I am sure you will be interested.

In the beginning of the year the Young Women's Christian Association of Baltimore started a campaign to raise funds and increase its activities. A motion picture was conceived with the title "The Heart of the Blue Triangle," which was exhibited in the principal theaters of the city, with the result that in less than a week the desired amount was oversubscribed. The most gratifying feature was the fact that, soon after the exhibition, the increased activities of the institution were quickly manifested by a greater demand for membership and the formation of enlarged classes. The successful accomplishment in Baltimore soon reached the headquarters of the Young Women's Christian Association in New York City, and the picture was exhibited in other cities where campaigns to raise funds were contemplated, or where the work of the Association was to be furthered.

As an educational factor the motion picture holds first place. We have had the opportunity to prove it in Baltimore during a health campaign inaugurated last April under the auspices of the Jewish Health Bureau of which I am vice-president and chairman of the Health Campaign Committee. The object of the campaign was to arouse an interest in the public health and enlighten the general masses upon the principles of clean living and disease prevention. The campaign lasted a week with mass-meetings in theaters where lectures were delivered by sanitarians and health experts on the various subjects allied to public health. Here again the motion picture proved invaluable. All lectures were illustrated by pictures having a direct bearing on the subject discussed. This accomplished wonders in emphasizing the lessons we wished to convey. The subjects of the pictures were: "The Price of Human Lives" (dealing with the patent medicine evil); "The Trump Card" (importance of milk sterilization); "The Street Beautiful" (neighborhood hygiene); "Ten-Minute Vacations" (ten-minute rests —public baths); "The Man who Went Sane" (dealing with danger of overwork); "Cooking—Choice of Foods"; "Care of the Teeth"; "Care of Babies"; "Recreation for Children"; "Fight to Win" (dealing with sex hygiene); "The Awakening of John Bond" (dealing with tuberculosis); "Soldier of Peace" (prevention and care of contagious diseases); "The Fly Pest"; and "Garbage Disposal."

The pictures were the chief attraction on all our programs, and the favorable comment was most gratifying. May I mention, incidentally, that these illustrated health lectures will be continued next winter. So successful was our experiment that the City of Wilmington, Del., is planning a similar city-wide health campaign.

Our third experience with the motion picture, and the one which will interest you most of all, was the photoplay especially prepared for the fiftieth anniversay of the founding of the Hebrew Hospital of Baltimore. The celebration took place in May in one of our largest theaters, the object being to acquaint the people with the work of the hospital and to review the institution's progress during the past half century. Recognizing the impossibility of bringing to the hospital three thousand people to see our activities, we were enabled to bring the institution to the theater through the medium of the "movie." That it was an immediate success goes without saying. Many in the audience never realized that the hospital was rendering such invaluable service to the poor and needy of our community. Although the object of the celebration at this time was not for the purpose of raising funds, nevertheless we hope to use this picture in a campaign in the near future to further the development and extension of the hospital.

Our fourth experiment with the motion picture, now in progress, is for the purpose of obtaining a larger class of probationers for our training school. The universal shortage of applicants is undoubtedly known to you. In spite of all our efforts, our advertising in magazines and periodicals, the results have been fruitless. We have filmed our nurses' home showing the ideal conditions under which our nurses are cared for, and for the past week have been exhibiting the picture in several of the prominent theaters in Baltimore. I regret that I am not as yet in a position to report favorably on the experiment, but I feel perfectly confident that the result will prove satisfactory.

In conclusion, I wish to repeat that the motion picture is a valuable advertising means for institutions, particularly to those institutions dependent upon public support. Our experiences of the past year have been so valuable and productive that I beg your indulgence for the presentation of the subject at this meeting, trusting that you will accept it for what it is worth.

HOSPITAL AND HEALTH SURVEY IN CLEVELAND, OHIO

Four Contributing Factors to Efficient Work of All Health Organizations—Study of Existing Facilities of City

An extensive hospital and health survey is to be made by the city of Cleveland, Ohio. A special committee of the Hospital Council has been appointed for this work, of which Mr. Malcolm McBride is chairman, and Mr. Howell Wright secretary. Dr. Haven Emerson of New York has been secured as director of the survey. The general outline of the hospital and health survey is as follows:

Hospital and health activities have a common purpose. It is better public health and fewer preventable deaths. There are four fundamental contributing factors to the efficient work of all hospital and health organizations working to this end. These are (1) development of medical education, both postgraduate and undergraduate; (2) development of nursing education, both general and special; (3) advancement of public health and preventive medicine; (4) care of the individual sick.

Due consideration must be given to each of these four factors in considering the work of any individual hospital, health organization, or group of such organizations.

The work of this committee may be divided into two parts—

Part I. *A survey and study of the existing hospital and health facilities, public or private, of Cleveland.*—It should determine the contribution which is now being made to the common end by the different institutions individually and collectively; discover ways in which these institutions may be made to contribute more by reasonable changes either in the division of labor with other institutions, the volume of work done or contemplated, or in the way of doing the work. This involves a study and survey conducted along the lines outlined below.

(1) Medical education in Cleveland as at present conducted.

(a) Use of clinical material and facilities in Cleveland by the medical school for undergraduate instruction; for postgraduate instruction of young medical men; for instruction and development of the medical profession in general.

(2) A study of the nursing education as now conducted in Cleveland.

(a) Training schools giving general nursing education.

(b) Facilities for providing nurses with special education and training.

(3) The Department of Public Health and the City of Cleveland and its relations to the hospitals, dispensaries, and other medical institutions and the profession in general. Its activities in the care of contagious diseases and in preventive medicine.

(4) A study of the present existing hospitals and their plans for extension, to determine

a. The available and contemplated facilities for
   - Pay or private room patients
   - Part-pay and ward patients
   - Free patients

b. The probable normal needs of the community for each of these classes of accommodations.

(5) A study to determine the present and contemplated facilities, as well as the probable normal needs of the city for the care of certain classes of sick.

- Contagious, including venereal diseases
- Acute surgical
- Acute medical
- Chronic surgical and orthopedic
- Chronic medical
- Convalescent
- Insane and mental diseases
- Aged and infirm
- Maternity
- Babies and children
- Accident and emergency

} The immediate development of facilities for such patients as means of saving hospital space?

(6) Dispensaries. A study of their location as to their availability to all Cleveland citizens in need; the type of cases receiving treatment therein; the facilities of the various dispensaries to do properly the work undertaken.

Part II. *Study of the Community.* The second part is a more extended study of the community to determine the ideal number, grouping, location, character and functions of the hospital, medical, and health institutions which can best serve Cleveland at present and during the reasonable future development of the city. This entails the following—

(1) Morbidity accident and mortality rates for the city, as a whole, and by districts, based on city statistics, questionnaires to doctors, hospital and dispensary records, Industrial Commission reports, United States census figures on occupations, races, ages, and morbidity, censuses in other cities, perhaps house to house canvass of selected districts to learn amount of sickness, total and classified.

(2) Care secured by the sick. Economic ability to secure care. Home conditions affecting care. Knowledge or ignorance of existing facilities. Effects of agencies to reach those needing their care. Constituencies of various hospitals or attraction of hospitals for various groups. Survey of adequacy of home care in typical neighborhoods.

(3) Capacity and facilities of existing agencies for giving the amount of remedial care shown to be needed by studies of the amount and present care of all sickness, accidents, and by prospective increase of population.

(4) The estimate reduction in sickness from extension of preventive medicine and health insurance, based on European experiences.

(5) The medical school's relation to present and future hospitals, dispensaries, sickness prevention, and the health department.

(6) The relation of nurse training schools to present and future hospitals, dispensaries, sickness prevention, and the health department.

MILITARY SURGERY IN RELATION TO CIVILIAN PRACTICE

Care of Slight Wounds Important—State-Wide Hospital Service Peculiarly Pertinent in Discussions of Health Insurance

What the 34,000 doctors, who were engaged in active war work, have learned from their military experience which may be adapted to their civilian practice, is a timely question. Now that hostilities have ceased and these thousands of doctors have turned from the problems of war to those of peace, what increased resourcefulness will they have?

In answering these questions, William E. Lower, M.D., F.A.C.S., Cleveland, has presented certain analyses of his surgical experience gained during more than a year's service in a Base Hospital and in a Casualty Clearing Station behind the British lines, in *The Ohio State Medical Journal*, October, 1919, under the title "Certain Lessons From Military Surgery." The paper was also read before the Ohio State Medical Association at its seventy-third annual meeting.

These doctors, according to Dr. Lower, had as their ruling purpose the return to the fighting line of the largest possible proportion of the sick and wounded in the shortest possible time. The importance of the care of slight wounds was also realized, whereas often in our hospitals today the slight wound is too often considered of trivial importance.

The importance of keen surgical judgment as well as efficient technic is brought out in the following:

"Of prime importance was the first surgical contact with the wounded. Therefore to the casualty clearing stations only the most experienced surgeons were sent, for there the ripest judgment was needed as well as the most efficient technic. It was inevitable that many mistakes would be made—often a good surgeon was found in an administrative position and a good administrator with less surgical experience was assigned to the operating room. Such mistakes are at times inevitable in the stress of rush periods. It is also possible that the keen surgical judgment which assures an accurate diagnosis may not coincide with the possession of a good operative technic. Nothing could more clearly demonstrate the need of the right man in the right place than seasons of stress during heavy offensives when the procession of wounded was continuous day and night, when operating teams worked in relays, when instant judgment as to the required procedure in each case was demanded in order that the waiting wounded might not be too long delayed, when a mistaken judgment would mean the permanent loss of a fighting unit.

"Why should not a like differentiation of functions be applied to the greater efficiency of the civilian hospital, where the surgeon of ripest judgment, of widest experience could best benefit the patient by exercising that judgment in his behalf in the operating room, by overseeing and directing the procedures of the technician, of the anesthetist, of the assistants; in the wards by making certain that every harmful contact that might interrupt convalescence is abolished.

"Never more emphatically than in the Military Hospital has the importance of considering the patient *as a whole* been so clearly demonstrated. Equal to the beneficence of

the Thomas splint on fractured thigh is the beneficence of anociated *environment* at every step of the patient's progress. As in the anociated operation every rough contact with instrument or hand is eliminated, so in the whole path from consultation to hospital, to convalescence, every possibility of rough contact with office attendant, hospital attendant, intern and nurse must be eliminated. The value of the protected operation and of environmental influences have been demonstrated on a vast scale in the base hospitals in France. Shall we do less for the patients in our civilian hospitals?

"I believe that almost without exception every medical man who has seen military service will return convinced of the value of organization and discipline. Assuredly much would be gained both by the individual and by the community by the establishment of an efficient organization. The value of the elimination of the time factor in the treatment of the wounded in war, with the resultant bringing of Casualty Clearing Stations nearer to the front and the final development of the Mobile Hospital unit leads us to contemplate with something akin to dismay the crying lack at home, as far as the small community is concerned. If our cities may be considered base hospital centers, where are our casualty clearing stations, our mobile hospital units wherewith to meet the surgical and medical casualties in the outposts—the small town and farming community? The problem of a "state-wide hospital service" is a peculiarly pertinent one today in connection with the proposed legislation for health insurance. As in war, the prime need in the civilan community is to put and keep the greatest possible number of individuals "in the front line." The problems that confront us are the same as those which met us in the Army Service—conservation and restoration."

Strange requests are sometimes received by the Federal Board of Vocational Education from disabled men seeking training in new occupations. One man who had been a plumber and had lost three fingers during the war threatened to disrupt the whole Board before he could be made to see that it would be useless to give him piano lessons. One who had asked for instruction in auto-mechanics was found learning electric welding and refused to take the course offered him. Tuberculosis had become active in another applicant, and it was with great difficulty that he was made to see the necessity of attending a sanitarium until the disease was arrested before he could successfully receive training in any vocation.

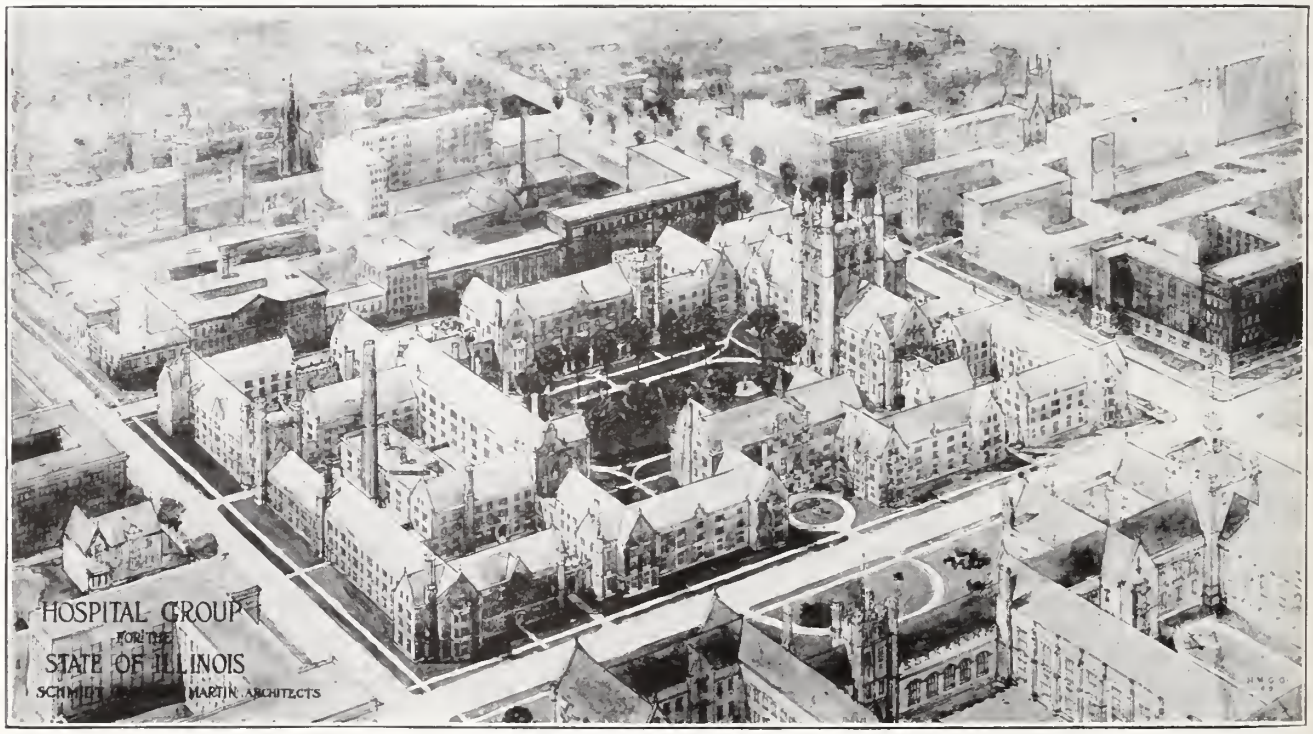
HOSPITALS FOR THE UNIVERSITY OF ILLINOIS

Center Which Will Furnish Clinical Material for Medical Students of the State to be Built on Group Plan—Will Adjoin Cook County Institution on the South

Work on the initial units of a large group of hospitals which will furnish the clinical material for the University Medical School has been begun as the result of an agreement between the officials of the State Department of Public Welfare and of the University of Illinois. The old Cubs ball park just south of Cook County Hospital, Chicago, has been purchased for the site.

The first buildings to be erected will be the Clinical Hospital, the Surgical Institute for Crippled Children, the Psychopathic Hospital, the Out-Patients' Department, the Administration Building, the kitchens, and power house. The buildings will all be fireproof of brick and stone with slate roofs.

All the details have not been settled, but the group plan has been tentatively approved, and is a very radical departure from the usual plan for a large group. In appearance, the hospitals will resemble a group of college buildings, rather than an institution. The effect is one to be desired, but the methods and economies of operation were studied before determining upon this particular style of architecture.



Birdseye view of proposed new group of hospitals which will furnish the clinical material for the University Medical School. Buildings will be erected on site just south of the Cook County Hospital.

As a clinical center, the hospitals will have no equal in the United States and possibly not in the world. Within a radius of a mile there are now nearly 4,200 hospital beds. With the addition of the state hospitals, this will form the richest center of clinical material in existence.

TO STUDY HOSPITAL FACILITIES OF OHIO

Recent Legislation Initiates Relations Between State Department of Health and Hospitals—First Step to Register Institutions

The present General Assembly of Ohio, in passing upon two measures (Senate Bill No. 15 and House Joint Resolution No. 13), established relations between the State Department of Health and all hospitals and dispensaries within its jurisdiction. Of these measures the joint resolution provides for a study of the hospital and dispensary facilities of the state and their mutual and public relations. This resolution was the result of the need of additional facilities developed by the recent influenza epidemic. The other measure is an act based upon the recommendations of the committee appointed by the Governor as the result of action by the General Assembly, in 1917, to investigate the various phases of medical services and to report with legislative recommendations. Statutes on the books prior to the passage of these measures gave to the State Department of Health general supervisory powers over the extension and operation of tuberculosis hospitals and dispensaries and authorized it to inspect and license maternity hospitals. The new measure enacted, so far as the State Health Department is concerned, empowers the commissioner of health to define and classify hospitals and requires all hospitals and dispensaries, public and private, to register with and report annually to that department.

For the purpose of administration under this legislation, a bureau of hospitals and dispensaries has been established in the Division of Hygiene and it is undertaking registration as the first logical step. Registration forms were prepared after a consultation with representatives of various types of hospitals and dispensaries and are now being mailed to such institutions as we were able to discover through various published directories and from miscellaneous sources. It was early found that the published lists did not yield a complete roster of the institutions now operating. The most complete hospital directory listed three huundred and five strictly hospital institutions. By checking other directories and the department's list of licensed maternity hospitals the number was increased to approximately three hundred and fifty. Probably a considerable number will be added to this total before registration is complete. In the dispensary field the matter of compiling a mailing list offers greater difficulties, as no published list of this class of institutions has yet been located.

This situation in itself seems to offer sufficient argument for the establishment of a central agency of enough scope, authority, and means to make and keep available a record of at least the extent and distribution of a service as necessary to the public welfare as hospital and dispensary service has become. Important as this may be from a purely public aspect, it is no less important to those whose interest, while finally public, is still immediately in the development of the hospital as such. Certainly they should know where they are going, how rapidly and with whom they travel. Happily there is little or no question of the advisability of this procedure in a representative gathering of hospital people, the point being raised merely to emphasize need of attention to the subject from both the public and the hospital viewpoint.

To complete the department's mailing lists recourse will be had to communication with local officials, medical, civic, social service, and industrial organizations, which, combined with a study of records in other state departments, local directories and personal investigation, will eventually result in a practically complete directory of Ohio's hospitals and dispensaries and enable us to secure a comprehensive registration.

It might appear at first that a prerequisite to registration would be a definition of the institutions under question—that is to say, it might seem that the question of just what constitutes a hospital or dispensary must be determined before attempting registration. It is just as necessary, however, from a practical standpoint and in the light of present meager knowledge of institutional and organized medical service as a functional unit, that we have some idea of the extent, purpose, accomplishment and relations of certain types of institutions that are not clearly recognized as hospitals or dispensaries in the general acceptance of the terms. It is a question, then, of whether a definition should include these institutions. This cannot be determined without at least a preliminary study of such institutions and this involves locating and gathering the information regarding them, a procedure which, obviously, begins with registration when means for that step are provided.

The department, therefore, is requesting registration of all institutions and organizations that might conceivably be classed with hospitals or dispensaries and is deferring the relation of definitions until further study and conference justifies it in adopting a definite policy in this connection. Hospitals and dispensaries are to be registered on separate forms. When one administration conducts both activities it will be asked to register each one on the proper form. Public organizations, health departments, and schools, conducting a number of hospitals or dispensaries, are to register separately each unit under their supervision.

With this work under the new legislation barely started, practically nothing can be said at this time relative to classification further than that this phase of the work will be taken up after tabulation of information gathered from the registration forms and collected by way of questionnaire and after personal visits to a representative number of the typical institutions, combined with that given in the annual report forms, which will be submitted to the institutions in time to report for the calendar year 1919.

In establishing and maintaining relations with the institutions under discussion it will be the policy of the department to reduce to a consistent minimum the work devolving upon the institution as the result of these relations. The department will endeavor amply to repay hospital and dispensary organizations for their expenditure of energy by returning to them the complete results of the study. Due regard will always be given to the opinions of hospital representatives, expressed in conferences arranged by this department for that purpose. General policies will be adopted upon this basis and no effort will be spared to secure the confidence and active cooperation of all who are concerned with the hospitals of the state.

In general, the State Department of Health interprets the new matter enacted by the present General Assmbly to be a sound, authoritative basis for a thorough study of institutional and organized medical service as it exists in this state, to be undertaken from the standpoint of the

public health. Believing that the public and hospital interests are finally one, we must assume that whatever is designed for the public good in this direction must be good for the hospital also. Owing to the lack of available knowledge of the accomplishments and public relations of the hospitals and allied institutions, as an organized force, the question may be approached without fear of bias, and because authorities who speak for these institutions express the need of just what is being undertaken here, the department is confident of the active support of all hospitals and dispensaries in this state.

NEW HOSPITAL ADDITION TO CARE FOR PRIVATE PATIENTS EXCLUSIVELY*

Jane Frances Brown Building at Rhode Island Hospital to Be Home-Like in Its Appointments, and Last Word in Scientific Equipment.

Ground was broken early in September, and the foundations are now well under way for the "Jane Frances Brown Building for Private Patients" at the Rhode Island Hospital, Providence, R. I., plans of which have been under preparation for many months by Kendall, Taylor & Co., hospital architects, of Boston. It is hoped to continue the construction without delay and have the building completed before another year has passed. This institution will then have an agency which will be a splendid extension of its already wide field of work.

The building will take care of a class of patients for whom it has not previously been able to provide to any great extent, patients who are desirous of having, and able to obtain the conveniences and comforts heretofore provided only by privately owned hospitals. Moreover, it will provide for them in a much more scientific manner.

The funds were left by the donor with a full knowledge of the needs of such a building in this community as well as in nearly every community of similar size. With this in mind, the trustees and the architects have, they believe, planned for a building which, in its appointments (whether for patients, for the physicians and graduate nurses, or for the administration) lacks nothing.

The site is to the northeast of the main building, facing the south and overlooking a beautiful park and drives. Approach for patients arriving by automobiles and for physicians will be from the north, where a special parking space has been arranged, somewhat apart from the patients' rooms, which are wholly on the south, east, or west. An ambulance entrance is provided for on the east, on the ground floor, and from the main building on the west by a semi-submerged passageway. The principal entrance will be from the south by foot paths through a formal garden.

The building will be six stories high, and, while it is planned for ninety patients, over one hundred can be accommodated, if it is desired to utilize more of the rooms as two-bed rooms. The feature of two-bed rooms is proposed if it is found that there is a greater demand for this type of rooms than there is for that of single occupancy. This will indicate even to the lay mind the spaciousness of the rooms when utilized for a single person. All rooms are arranged *en suite*—two or more—and there is a private toilet for every room in the building. Some rooms will have private baths, but the majority are arranged for a single bath to two rooms.

The hospital has one of the finest operating suites in the east, but in spite of this, it is planned to have another of three rooms in the new building with adequate accessory rooms for the exclusive use of this building.

Ample balconies will be provided. The two very large and airy sun or sitting rooms on the southerly side of each floor will be so arranged as to permit of their use in inclement weather as well as on nice days.

The building will, of course, be fireproof in every sense, the external treatment being a granite base course and red brick with limestone trimmings.

The portion occupied by the patients is to resemble a high grade metropolitan hotel; consequently the usual features of flush doors, coved corners, and similar developments of the past ten years will appear only where they are really needed, in the toilets, baths, work room, diet kitchen, and operating suite.

It is believed that this special treatment together with the wall colors, window hangings, and furniture will do away with the extreme institutional effect caused by the elimination of what might appear to be non-essentials, but which, consciously or unconsciously, add to the attractiveness of one's surroundings while sick.

A more detailed and illustrated description of this building will appear in a future issue of THE MODERN HOSPITAL.

The Rhode Island Hospital and the locality which it serves are to be congratulated upon the prospect of such a splendid enlargement to an already active service.

*An illustrated description of the Rhode Island Hospital will be found in the August, 1919, issue of THE MODERN HOSPITAL, page 81; and an article on the new Service Building of this hospital was published in the Februarly, 1919, issue, page 85.

War Chest for Anti-Tuberculosis Work

"The White Plague Next to Go," is the slogan of the Red Cross Christmas seal campaign. National, state, and local organizations are focusing their effort so as to make

The Tuberculosis Associations and the Red Cross expect to sell $6,500,000 worth of Christmas seals this year.

the tuberculosis problem a public issue of tremendous importance from December 1 to 31. It has been decided that at least $6,500,000 should be raised during 1920, and each state is asked to raise its share.

An intensive personal solicitation for funds for this tuberculosis "war chest" will be a feature of the campaign and all sales will be receipted for with Red Cross seals. The mail sale plan will be used to supplement the solicitation method both in cities and in the rural districts. The amount received will be divided between the state and national associations

STANDARDIZATION PLANS OF CLINICAL CONGRESS OF SURGEONS

Doctors Face Their Obligations to Hospitals—Canadian Hospitals Show Great Interest—Catholic Hospital Association Pledges Unreserved Support—Crystallization of the Aims of Standardization

The meeting of the Fellows of the American College of Surgeons, gathered at the Waldorf-Astoria, New York, October 24, marks a most constructive step forward among hospitals. The day was given to hospital standardization. The ball-room of the Waldorf-Astoria was crowded, 2,940 doctors being registered. In addition, a group of hospital superintendents and trustees was present.

Probably never before was so large a group of doctors assembled to consider hospital problems; nor did any group ever strike a higher or more unselfish note in considering hospital matters. The key-note of each session was this: Are we individually doing all that we can for the right care of patients in our hospitals? Do we put aside self-interest and work for the perfection of our hospitals to the end that every patient receives the best care possible for the staff to give? Do we hold regular staff meetings? Do we study each case as it should be studied and record that study in a case record? Do we face our failures frankly and make every effort that the same failures do not occur twice? Have we an efficient laboratory service in connection with our hospitals? If not, have we done all in our power to create such laboratory service?

Such a spirit in the medical profession means a new era among hospitals. It means coöperation. It means a strengthening of the hands of hospital superintendents. It means a new interest in hospitals on the part of the public and a new support of hospitals from the public. It means that the American College of Surgeons has accomplished an intangible good for hospitals that is beyond estimate.

First and last the work of the College is constructive. It is also practical and definite. After years of work the College placed before the hospitals a "minimum standard" and then asked the coöperation of hospitals in meeting this standard. It asks coöperation only on the basis that the "minimum standard" is sound and right. The standard costs effort rather than money. It penetrates to the very heart of each hospital organization; it makes for better "production sheets" in the care of patients.

John G. Bowman, director of the College, stated the minimum standard as follows:

THE MINIMUM STANDARD

1 That physicians and surgeons privileged to practice in the hospital be organized as a definite group or staff.

2. That membership upon the staff be restricted to physicians and surgeons who are (a) competent in their respective fields, and (b) worthy in character and in matters of professional ethics.

3. That the staff hold meetings at least once each month to review and analyze the successes and failures in the treatment of patients.

4. That accurate and complete case records be written for all patients and filed in an accessible manner in the hospital.

5. That clinical laboratory facilities be available for the study, diagnosis, and treatment of patients.

PRACTICAL APPLICATION OF THE MINIMUM STANDARD

In explanation of the minimum standard Mr. Bowman said in part:

"The primary purpose of nearly all hospitals is the care of the sick or injured. This means that, as a matter of policy, the hospital seeks to render to each patient admitted the most efficient care known to the staff of the hospital. Hospitals and doctors accept this interpretation; otherwise the hospital would be merely a boarding-house for the sick or injured. Further, the trustees of the hospital, having accepted this policy, are responsible for the administration of the policy; and the people of the community have a right not only to assurance that the policy is carried out, but also to the facts upon which such assurance is based. It is only upon such a relationship of mutual confidence that the hospital may reasonably ask the good will and support of the community.

"If the board of trustees is responsible that every patient, free or pay, in the hospital receives the best care known to the staff, then the board must at frequent intervals be in possession of the facts as to the care received by the patients in the hospital. The board must know, for example, if any unnecessary surgical operations are performed in the hospital; or if incompetent surgical operations are performed; or if lax, lazy, or incomplete diagnoses are made. If infections occur, the board must know, as nearly as may be, the cause of the infection, and it must know that every reasonable effort is made to remedy the cause. If the time of patients is wasted between their admission to the hospital and the proper study, diagnoses, and treatment of their illness, again the board must know the facts and take action promptly to prevent further waste of this kind. Too frequently hospital trustees consider that their duties end with the management of the financial affairs of the hospital.

"Among the 671 general hospitals of 100 or more beds, in the United States and Canada, about 468 of them cannot present at this time even a fairly complete analysis of their clinical work.

"In order to make more clear what is meant by an analysis of the clinical service of a hospital, the following two series of 100 operations for chronic appendicitis are here presented:

	In Hospital No. 1	In Hospital No. 2
Complete physical examination, including blood count	100	14
Number of consultations held	41	2
Working diagnoses recorded in advance of operation	100	None
Progress notes recorded by doctor	100	None
Infections following operation	3	12
Incorrect diagnoses	4	14
Number of patients relieved	94	77
Number patients died	2	9

"The analysis of the cases treated in Hospital No. 1 shows that a complete physical examination was made and recorded for each patient; that in order to clear away doubt as to the diagnoses, consultations were held in forty-one cases; that the working diagnoses in each case were, then, in fairness to the patients, recorded in the permanent records of the hospital; that, after the operations, the physicians or surgeons in charge of each case

made or signed daily a statement of the progress of the patient; that infections developed in three cases; that the number of incorrect diagnoses was 4; that the number of patients apparently relieved of their illness was 94; and that two of the patients died following operation. This record is a credit to the staff of the hospital.

"The corresponding data are now given for a similar series of cases in Hospital No. 2. The data as here presented could not occur in a hospital which meets the Minimum Standard. In a hospital which meets the Minimum Standard, for example, it is not possible that any patient, except in an emergency, will go to operation in advance of a complete physical examination. But in Hospital No. 2 eighty-six of the patients were operated upon without a complete physical examination, it seems, after guess-diagnoses rather than after scientific diagnoses with consultations when indicated.

"Considering the record of Hospital No. 2, is there anything unreasonable in asking that the staff meet at least once each month, that it analyze the facts of its clinical work, that it determine, as nearly as may be, the causes of its failures; and that, demanding the support of the trustees, it endeavor to remove these causes? For example, twelve of the cases developed infection. Whose cases were these? What is the nature of the infection as indicated by laboratory analysis? Were the cases operated in rooms where pus cases had also recently been operated upon? Is the sterilization in connection with the operating room effective? When was it last tested and how? What technique is carried out in connection with surgical operations? If the staff of Hospital No. 2 would in dead earnest ask such questions as these each month, the percentage of infections would undoubtedly decrease. If the staff-review were really penetrating, the percentage of deaths would undoubtedly decrease. Matters, too, of incompetence, when the facts indicated incompetence, would be dealt with in no uncertain manner. The staff would become restricted. The doctor scarcely exists who, if incompetent and if his incompetence is brought to light at frequent intervals, will not either endeavor promptly to perfect his training or retire from membership in the staff. The same principle is true with regard to character and professional ethics. Can any staff rest content with less than its maximum effort at all times to perfect the service of its hospital?"

THE PROGRAM OF THE MEETING

The program of the morning session, which was continued throughout the afternoon with discussion, is here presented:

Waldorf-Astoria Hotel, New York, October 24, 1919
Dr. William J. Mayo, Presiding

Introductory.....Dr. William J. Mayo
President of the College

Standardization in Catholic Hospitals.....
.....Charles B. Moulinier, S.J.
President, Catholic Hospital Association

The Work of the College in Hospitals...John G. Bowman
Director of the College

Practical Application of Hospital Standardization—

At the Vancouver General Hospital.....
.....Dr. M. T. MacEachern
Superintendent

At the Woman's Hospital, New York.....
.....Dr. George Gray Ward, Jr.
Chief Surgeon

At St. Vincent's Hospital, Los Angeles.....
.....Dr. Edward Thomas Dillon
Surgeon in Charge

At Mt. Sinai Hospital, Cleveland...Frank E. Chapman
Superintendent

Dr. William J. Mayo, before introducing the speaker, said in part:

"I think this hospital standardization has a possibility of good that is not recognized even by those who are engaged in the hospital work itself. If the patient is to receive what he has a right to expect, the hospital must furnish certain things in addition to an opportunity for the doctor to do work.

"Now, let us bear in mind all the time that the doctor and the hospital exist for the benefit of the patient. I think a good many have had a wrong idea. Some of you and some of the hospitals have felt that the College endeavors to force some sort of a set standard upon hospitals. I know that there is no such intent on the part of the College. Our hope is merely that with whole-hearted coöperation with the hospitals we may think straight and in some measure give speed to the progress which we all desire.

"I want to say again that the hospital exists for the patient and not for the convenience of doctors. Just so long as we keep on this ground that the doctors and the hospitals exist for the patients and that all of our efforts are made for the welfare of patients, we are on ground that is fundamental. We are on ground upon which we can get together."

A POWER FOR PROGRESS

Charles B. Moulinier, S.J., said in part:

"If there isn't organization among the doctors—real, genuine, active organization, including their minds and hearts and wills—if it isn't so strong as to dominate selfishness and put it in the background, as to make them forget personal interests, in view of the patient and in view of the needs and rights and demands of the patient, then the organization means nothing. It must be a real, earnest, working organization with meetings held at least once each month to which every man comes prepared to say what he thinks about the work of the hospital, prepared to accept criticism in a right spirit and prepared to struggle forward gladly toward an ever increasing perfection of service.

"Now, I know that it is going to take some time for some of our hospitals to reach the full spirit of this Minimum Standard. That standard is the mere *sine qua non* of hospital service, organization, records, and adequate laboratory service. But there is also a spirit, there is an effectiveness that will take years to achieve. There is a weeding out of medical men, of managing personnel, or nursing help in nearly every hospital that is needed before the full spirit of this Minimum Standard will be reached, and when that has been reached there will be absolute need—there is need now—of the further step of clinical research work being done in every hospital on this continent. The laboratory research work, out of which so much medical knowledge comes, will always be incomplete unless it is supplemented, aided, enlightened, checked perhaps, and in all cases advanced, by the clinical research which must go on throughout the country in the hospitals that are so numerous.

"I am just going to say in closing that I pledge to the American College of Surgeons, with my personal honor and all the official capacity I have, that the Catholic Hospital Association, with whatever force and power it has, the hierarchy of the Catholic Church, the clergy of the Catholic Church, and that great body of twenty or thirty thousand Sisters working in Catholic hospitals are going to coöperate with the College to the highest point. Just

be patient a little here or there and you will be satisfied, not to say delighted, with the kind of cooperation you will get from the Sisterhoods and from all this Catholic body."

LIVE HOSPITALS IN CANADA

Dr. M. T. MacEachern, superintendent of the Vancouver General Hospital at Vancouver, British Columbia, explained the practical application of hospital standardization in his institution by means of lantern slides. These slides illustrated both the forms of keeping records in the hospital and of analyzing these records by the staff. The fact of most interest in Doctor MacEachern's talk was that the hospital employs a director of medical records who, with an organization under him, is responsible for the carrying out of the rules and regulations governing the care of patients in the hospital which the staff has recommended and which the board of trustees has approved. The director of medical records follows in a kindly and yet critical way the progress of each patient in the hospital. Each month he prepares an analysis of the work done in all departments of the hospital and this analysis is presented to the staff for its consideration. Doctor MacEachern reported enthusiastically for the success of the plan.

At the beginning of his talk Doctor MacEachern said:

"I bring to you today a grateful and, I trust, an encouraging report from the Vancouver General Hospital, and I bring also gratitude and encouragement from the Province of British Columbia and from Western Canada. On my way through Alberta and Saskatchewan I found that the hospitals were actively moulding their policies along the lines of hospital standardization which we have heard here outlined today. That plan has come to us at the psychological moment. It has come at a time when reconstruction among our hospitals is the work of the hour, and at a time when all of our people are enthusiastic to create for themselves the right sort of institutions through which they maintain their right to be well. The College has helped us enormously as hospital workers. We are not only all pledged to hospital standardization but we are also now engaged in carrying out the program of hospital standardization in a real and practical fashion.

A HOSPITAL NOT AFRAID

Dr. Edward T. Dillon, surgeon in charge at St. Vincent's Hospital, Los Angeles, thus outlined, in part, the benefits of standardization in his hospital:

For many years St. Vincent's Hospital was conducted as a general hospital open to the individual. It neither attempted nor obtained any direction in methods of examination or treatment employed. It executed orders of general care and nursing alone.

However, the idea of bettering this situation grew and developed. Then, to accomplish a reform, it became necessary to subordinate the individual, to overturn a routine of years, to coördinate the efforts of the hospital and of the physician, to eliminate those of the profession who failed to meet the demands and responsibilities of a more complex organization, to do the best for humanity regardless of the personal equation.

Briefly, we have required these things: Complete and signed records or personal history and physical examination; routine blood and urine examinations and recorded blood pressure in all cases before any treatment whatsoever is instituted. There are no exceptions to this rule. Clinical diagnosis must be supported by laboratory findings. Patients are not allowed in the operating room unless accompanied by these records and with a written pre-operative diagnosis. All tissue removed remains in the possession of the hospital and is uniformly sent to the laboratory for diagnosis and recorded report. All records, together with the summary, final result, and follow-up card remain in and are the property of the hospital. Records are inspected and there must be the proper coördination between recorded findings, diagnosis, and proposed treatment. This applies particularly to surgical cases. Post-operative complications, delayed or unsatisfactory results are not considered a matter of individual responsibility. They are investigated by the authoritative coöperation of the staff and the hospital administration and the cause determined if possible. Regular meetings of the staff afford opportunity for discussion of problems or any problem or procedure connected with the hospital, care of the patients, service in the operating room, laboratory or any other department.

The hospital does not now hesitate to refuse admission to such patients as have incompetent medical or surgical advisors. The question of their refusal or admission is no longer a personal or individual matter but merely the meeting of certain well-founded regulations.

These things have not been accomplished without friction or criticism. But we have zealously endeavored to establish the merit of what we stand for. Already, discontent with and antagonism to the new order have practically disappeared. The benefits derived from the adopted measures of standardization have come to all patrons of St. Vincent's Hospital both within and without the profession. The careless or indifferent practitioner is inspired by examples of conscientious work to do better; the incompetent and dishonest practitioner has been suppressed. Patients have shown their appreciation of this great work through an increased waiting list for entrance to the hospital. The community at large has realized in a short space of time that the standardized hospital offers a collective and superior service. Its appreciation has also been shown by the demand for a larger institution; and offers of financial assistance carry out in a broader sense this great work.

KEEPING OF HOSPITAL RECORDS

Frank E. Chapman, superintendent, Mount Sinai Hospital, Cleveland, Ohio, dealt with the practical application of hospital standardization as pertaining to Mount Sinai Hospital, particularly as to the keeping of good case records. He said in part:

In order to get proper case records, it is essential that the administration furnish the machinery to make the record. This is expedited at Mount Sinai by the use of dictating machines. A medical organization should also be developed. The medical council, which consists of three directors of service and the superintendent, formulates all medical policies for the institution, and meets bi-weekly. In addition to this, the staff holds a monthly staff meeting at which matters of mutual interest are discussed. Attendance at these meetings is expected of each member of the staff, and a complete record of this attendance is made a part of the permanent files.

The attending staff appoints a history committee, which is held responsible for the histories of the institution. The house staff is organized under a Resident in Medicine and a Resident in Surgery, who with the interns and assistant residents hold weekly history meetings, presided over by the statistician, where all histories of patients discharged during the previous week are passed upon and approved by the resident on the service, the diagnosis checked to comply with the nomenclature, laboratory and other reports checked for completeness, in fact, the history completed as a whole.

Working in conjunction with the attending and house staff is the medical record room, presided over by the statistician, and employing two medical stenographers, who transcribe the dictation of the attending and intern staff. A full-time stenographer is on duty in the laboratory to take care of all laboratory reports, autopsy records, and similar records.

The machinery of taking records is comparatively simple. Although the cost of dictating machines is rather high, they are practically indispensable in the securing of a complete history quickly. An ideal method of taking a history was formulated by the staff, mimeographed in detail, and copies given to each member of the staff. The resident staff and each medical stenographer are also provided with copies. The routine procedures that are necessary for the admission of a patient to the hospital are charted on each history. Operative notes are placed with the patient's history; post-operative and progress notes on the ward are written in longhand. Patients must have a detailed statement of condition before they can be discharged, and before the history will be accepted by the record room.

Upon discharge, the history is immediately sent to the record room, where it is checked for omissions. It is then held pending the next history meeting, when it is rechecked by the house staff, and is then ready for filing. The International Classification of Diseases is the system used as the basis for filing, as it offers a greater elasticity than any other. Each disease has both a primary and complication card. All histories are filed by disease, rather than by name of patient or hospital number.

The institution has felt that all these records are of no value unless they can be presented to the staff in a compiled form that is readily understood, and for this reason a monthly summary sheet is mimeographed and mailed to every member of the staff, showing pertinent points developed in the analysis of the histories. This information is in key so it can be kept for each member of the staff interested.

"Notwithstanding the fact that it costs in excess of $4,000 per year to take care of our medical records," said Mr. Chapman, in closing, "I can unqualifiedly make the statement that it pays. The spirit of coöperation among the men of the staff is wonderful. The number of consultations on service cases has increased approximately 150 per cent in the period of time that we have put these expensive records into operation. The number of additional diagnoses and original diagnoses that are made has materially increased. The number of institutional infections has decreased because the infection is called to the attention of the man at the time, and remedial measures taken to prevent a recurrence, rather than allowing the matter to go by default. The information that can be obtained by the attending men in looking up their past performance is certainly of value to them, and the protection to the attending staff and to the hospital cannot be measured."

Employers Know Soldiers' Impairment

The placement officer of the Federal Board for Vocational Education is always careful when negotiating with employers to inform them of the physical condition of the disabled men for whom employment is sought. In order that their physical handicap may be minimized as much as possible, all disabled soldiers in need of medical examinations, treatment or hospital care, during their course of training under the Board, receive such attention from the medical officers of the Public Health Service.

HOSPITAL, MEDICAL AND SPECIAL MEETINGS

ANNUAL MEETING OF AMERICAN HEALTH ASSOCIATION

Reports Cover All Phases of Public Health Work—Recent Organization of National Health Council—Importance of Coordination and Enlargement of Federal Health Activities

A Federal Department of Health, State Health Societies, Health Centers, Community Medicine, Industrial Hygiene, Influenza, and Malaria were the outstanding topics discussed at the Forty-seventh Annual Meeting of the American Public Health Association held in New Orleans, October 27-30, 1919.

Out of the 250 odd papers and reports, covering practically every phase of public health work, only a few of special interest to our readers can be selected for brief comment.

In his presidential address, Dr. Lee K. Frankel reviewed the intensive membership campaign which the Association has been conducting this past year, and reported a gain in membership of 1,300. The Association now has about 4,500 members and for the first time in its history is self-sustaining, ending the year with a surplus of $5,000. This was accomplished notwithstanding the fact that the outgo for 1918-19 was over $30,000 as compared with $16,000 for 1917-18.

Doctor Frankel reported the organization during the past year of a National Health Council comprising seventeen of the most representative national societies in the United States who are engaged in some phase of work relating to the improvement of public health. A committee is now at work preparing a constitution and by-laws and will present its report in the near future. This newly formed organization, it is expected, will be actively at work during the coming winter and it is hoped that the development of the council will lead to the organization of new phases of health work and the elimination of unnecessary ones.

A vital topic touched upon by Doctor Frankel and later more fully discussed at one of the general sessions of the convention, was "The Coordination and Enlargement of Federal Health Activities." Doctor Frankel regards the creation of Ministries of Health in England and Canada as the most momentous development in the annals of health during the past year, and feels that the example set by these two countries will give impetus to a similar movement in the United States.

Whatever may be said as to the desirability and possibility of creating a Federal Department of Public Health with a cabinet minister, Doctor Frankel feels that it cannot be gainsaid that there is need of a better coordination of the various Federal bureaus dealing with problems of public health.

"The time has come, I believe," said Doctor Frankel, in one of the concluding paragraphs of his address, "for the American Public Health Association to give earnest

consideration to this important matter. If a concerted, unified, comprehensive Federal health program is to be evolved which should be a pattern for the states to follow; if we are to increase our national vitality; if we are to profit by the lessons of the draft, which showed only too glaringly our physical defects and our lack of provision to prevent them; if we are to avoid premature decay and unnecessary death; if we are to develop a people which shall be virile, strong, competent and efficient,—then we must have a centralized, coordinated, progressive Federal health agency under competent leadership, and with adequate staff and ample financial resources. Such a centralized agency must replace our present anachronistic system, under which responsibility for the preservation of the people's health is vested in various departments of the Federal Government unrelated to one another, and which results in duplication of effort, overlapping of work, and corresponding waste and inefficiency. It is immaterial for our present purposes whether centralization be effected through the creation of a department of health, through a newly created bureau, or whether an existing bureau be utilized. It is important, however, that Congress enact legislation at an early date which shall make for intelligent centralization, coordination, and expansion of Federal health activities."

The general session Wednesday afternoon, October 29, was largely devoted to a discussion of the subject of the coordination of Federal health activities. The principal paper was read by Dr. W. S. Rankin, secretary of the North Carolina State Board of Health, who stated that five cabinet departments—Treasury, Labor, Commerce, Agriculture, and Interior—have shared in the investigations and administration of health service, and he contended that this service must be centralized if the present overlapping, duplication, and waste are to be obviated.

A special committee of the American Public Health Association is at work on this problem and through cooperation of similar committees of the American Medical Association and of the Conference of State and Provincial Health Officers, is endeavoring to secure the adoption of a national health program.

In discussing Doctor Rankin's paper, Dr. Frederick R. Green of the American Medical Association, drew attention to the fact that during the past forty-eight years, twenty-five to thirty different bills relating to the reorganization of Federal health activities have been introduced in Congress, but that thus far no thorough consideration had been given to some of the fundamental principles underlying this great problem.

In his opinion, these principles, thrown in the form of questions, are: What can the Federal Government do under the constitution? What is the Federal Government now doing? What should the Federal Government do? Until these questions are answered, Doctor Green believes little real progress in solving this problem can be made. These broad questions, Doctor Green and others feel, should be thoroughly studied by a nonpartisan Congressional Commission which would have the power to summon expert witnesses and command technical advice, thereby securing the comprehensive data out of which a national health program can be formulated and adequate machinery set up to carry it out.

Doctor Green stated that very recently bills had been introduced in Congress calling for the appointment of such a Congressional Commission. He contended that this was the only scientific, economical, and practical method of procedure.

The program of the Sociological Section under the chairmanship of Dr. Lewis I. Harris of New York, was replete with interest. The first session of this section was devoted to the general topic, "Relation of Living Conditions to Health."

Mr. Royal Meeker, Commissioner of Labor Statistics, Washington, D. C., presented the results of careful study of family budgets and the conclusion that the majority of families with an annual income below $1,500 were not able to maintain healthful standards.

The striking paper of this session was that of Dr. Donald B. Armstrong, director, Community Health Demonstration, Framingham, Mass., under the title, "A Sanitarian's Definition of a Living Wage." Doctor Armstrong contended that it was more important for the sanitariums to find out what the essentials of living are than what they cost and that it was even more important to define "living," for on this definition will depend the definition of a living wage.

We must realize with Robert Louis Stevenson that living is more than existing; that "it is not life we love but living."

The average family, Doctor Armstrong contended, must have the means to prevent diseases, such as proper environmental conditions, proper living materials, and adequate professional care. The family must also have the means to create health, and this means recreation, leisure, and education, as fundamentals for happiness.

The isloated lumber camp workers with no opportunity for recreation, leisure, and education cannot buy happiness which is essential to health, for it is not there to buy. To talk about a living wage for this man is out of the question for he cannot live.

We must realize also that simply to talk health will not create it, neither will an adequate income insure healthful living. Only those who have an interest in their work and who appreciate the value of health to their job will practice health. This means that they have an active, creative will to be healthy. The proper adjustment of the man to his job and his appreciation of the need for health in his work, will give him not only the virility but also the *reason* for demanding a living wage, and will insure the use of the living wage for healthful purposes when he obtains it.

The second session of this section was an innovation and was devoted to a free discussion of industrial relations from three points of view: That of the Employee, by Frank E. Wood, Commissioner of Labor and Industrial Statistics, New Orleans, La.; that of the Employer, by Magnus W. Alexander, director National Industrial Conference Board, Boston, and that of the Public Health Worker, by Dr. Lewis I. Harris, director, Bureau of Preventable Diseases, Department of Health, New York City.

The final session of this section discussed the important topic, "Community Medicine." Dr. Ernst C. Meyer, director Department of Surveys and Exhibits, International Health Board, New York City, called attention to the important evidence that the reorganization of medical practice will be necessary to furnish adequate medical service to all classes of our population.

Dr. Francis E. Fronczak, Health Commissioner, Buffalo, in his paper on "Health Centers," which was largely devoted to a description of health centers established by his department in the city of Buffalo, made the interesting statement that the health center about which so much is heard nowadays, is not a new conception as there is historical evidence that health centers, primitive in form to be sure, existed in the early days of the Greek Republic.

Dr. Haven Emerson, formerly Commissioner of Health, New York City, and now Medical Adviser, Charity Organization Society, New York City, in his paper on "An

Evaluation of the Cincinnati Social Unit Experiment," briefly reviewed the health activities undertaken under this experiment. Doctor Emerson concluded that the experiment had been in operation too short a time to pass finally on its value but he felt certain that the trial had been well worth while. This paper elicited lively discussion.

One of the most stimulating papers of the convention was Dr. Mazyck P. Ravenel's paper on "Preventive Medicine in War"

Lack of space prevents our mentioning many other technical, though equally interesting, discussions.

Although the four days of the convention were literally packed with serious discussions of extremely important subjects, the convention was not without its social features.

The Louisiana Historical Society conducted trips for the women physicians and guests through historical portions of the city. Delegates and their guests were also entertained on Thursday afternoon on a boat ride on the Mississippi. Wednesday noon there was a round table luncheon for members of the Association in the "Cave" of the Hotel Grunewald, the headquarters of the convention. Business and pleasure were combined here, the after-dinner speeches being devoted to the general topic of "Adequate Appropriation for Public Health Work."

Two special sessions were held in the convention. One on "Child Hygiene" under the chairmanship of Dr. Julius Levy, director, Division of Child Hygiene, Newark, N. J., and the other on "Personal Hygiene" under the chairmanship of Dr. A. B. Dinwiddie, President of Tulane University, New Orleans, La.

Among the resolutions adopted were those urging the enactment of legislation under which provisions may be made for the correction of remedial physical defects by physical training; urging the appointment of committees in the several countries represented in the Association by their Federal Governments to study existing methods for preservation and improvement of the health of the people, such as hospital facilities, public health activities, charitable institutions, and compulsory health insurance, with a view to reporting some adequate plan for coordinating already existing activities and for extending the application of scientific and social agencies for accomplishing the desired ends; favoring legislation for increased compensation for officers in the United States Public Health Service; urging that a national medical examination week be appointed during the month of May, 1920, with a view to arousing the people to the necessity for periodical physical examinations; recommending that measures should be taken to assure for the future a National Health Program and a coordinated Federal health administration, and commending the work of the United States Army and Navy in combatting venereal diseases during the period of the war, and offering the active cooperation of the Association officers, members, and Committee on Venereal Diseases in promoting the Federal campaign against these diseases.

The officers elected for the coming year are: President, Dr. W. S. Rankin, secretary North Carolina State Board of Health, Raleigh, N. C.; vice-presidents, John Armyot, head of Canadian National Health Service, Ottawa, Canada; William H. Robin, superintendent, City Board of Health, New Orleans, La.; G. H. Sumner, retiring treasurer, Des Moines, Ia.; secretary, W. H. Hedrick, secretary American Public Health Association, Boston; treasurer, Lee K. Frankel, retiring president American Public Health Association, New York.

The Economic Position of Nurses

A comprehensive report on the economic position of nurses has been issued by the National Council of Women, says the *British Journal of Nursing*. The report covers physical welfare, uniform education, certificates, and salaries.

Women Are Members of Health Ministry

The bill for the establishment of a Ministry of Health in England and Wales now before Parliament, provides for Consultative Councils to act with the Minister in connection with the health of the people, says a writer in *The Women's Medical Journal*.

The membership of each Council is limited to twenty and includes both women and men, but the one which will have to do with general health questions will consist largely of women. The Minister will be assisted in a confidential capacity by a small panel of men and women possessing, collectively, a wide knowledge and experience of the several branches of the medical profession. Their duties will consist in the greater part of investigating possible nominees for membership on the Councils. Miss M. H. F. Ivens, M.S., has been nominated by the Medical Women's Federation of Great Britain to sit on a panel of eight men and women.

Advocates Municipalization of Hospitals

The municipalization of voluntary hospitals is advocated by Dr. Duncan Forbes, medical officer of health of Brighton, England, in *The Hospital Gazette*. He admits that people owe a debt of gratitude to the voluntary subscribers, but since it is the same people every time who are the large subscribers, and since hospitals are getting so expensive, he feels that the taxpayer should be made to pay instead of the few large subscribers.

The establishment of state or municipal hospitals would lead, in his opinion, (1) "to an equitable distribution of the burden of upkeep; (2) to a less wasteful method of collection of funds; (3) to a more equal distribution of beds to which patients would be admitted on doctors' certificates according to the urgency of their cases, and not by subscribers' letters as at present; (4) to an early general increase in the number of hospital beds maintained; (5) to an improved medical service; (6) to closer coordination of municipal and hospital work."

H. E. Webster Joins Staff of The Hospital World

Mr. H. E. Webster, superintendent of the Royal Victoria Hospital, Montreal, has recently joined the editorial staff of *The Hospital World*. Mr. Webster is already one of the members of the editorial staff of THE MODERN HOSPITAL. The following quotation is taken from an editorial in *The Hospital World*.

"H. E. Webster, as a young Englishman, came to Canada and commenced, in a very minor position, to work in the Royal Victoria Hospital—that magnificent pile of buildings on beautiful Mount Royal. Whether it was the influence of the mountain, or the sparkling St. Lawrence flowing to the sea, the association with such men as shepard, Bell, and Armstrong, or that bright French-Canadian girl who won his affections and is now his better half, that brought him to the eminent position he now holds as superintendent of the big place, we trow not. Mr. Webster is also on the editorial staff of THE MODERN HOSPITAL, but we claim, on patriotic grounds, the first fruits of his long and varied experience in hospital management."

DEPARTMENT OF NURSING

Conducted by CAROLYN E. GRAY, R.N., *Secretary, New York State Board of Nurse Examiners.*

Please address items of news and inquiries regarding Department of Nursing to CAROLYN E. GRAY, R.N., Secretary of the New York Board of Nurse Examiners, 135 E. 45th St., New York City.

CHRISTMAS IN THE HOSPITAL

Nurses Spending First Christmas in Hospital Find It Most Happy—How One Large City Hospital Spent Christmas

The words of my title conjure up a score of happy memories, and I seem to hear the voices of many nurses traveling down the years, telling how in anticipation each one dreaded their first Christmas in the hospital, and how surprised each one was to find it one of the happiest in their lives. Perhaps I can best illustrate by the following account of Christmas, 1918, in one of our large city hospitals[1]:

On Christmas Eve the nurses issued invitations to their friends and a large number assembled in the Lecture Room of the Nurses' Home to witness the representation of "The Star Child," a series of tableaux written and arranged by a Junior of the School. An assistant superintendent was the leading figure as the Mother of Love, while a group of younger nurses took the parts of the children. The staging, scenery, and dancing were very effective, and reflected great credit on the nurses who had worked most zealously in the production of both scenery and dresses.

A comedy was also produced, "'Op O' My Thumb," evoking much merriment. The acting was an astonishment to the spectators, and would have done credit to a company of professionals.

National dances in costumes were afterwards presented by the pupil nurses. From the stately minuet to the Dutch clog dance, it was easy to see that no small pains had been taken to make the production worthy of the occasion.

One could not but reflect on the uncalled-for talent latent in a group of women and girls whose lives are passed in the work of ministering to the sick.

Supper provided by the nurses was served in the library, and it was universally agreed that the Peace Christmas in the Nurses' Home verified its title.

On Christmas morning at 5:30 a procession of all the nurses not engaged on night duty, was formed at the doors of the Home, and headed by the faculty, marched through the darkened wards of the Hospital, each one carrying a lighted candle and singing the old Christmas carols. Every ward was visited, and as the light from the candles they held fell on the white-robed procession, no more impressive scene could be imagined, and it will not easily be forgotten, nor will the voices of the singers, rising and dying away as they entered and passed slowly out of the wards. Many of the patients joined in the music which evidently meant much to them.

Later in the day the hospital became the scene of Christmas cheer and merriment, and to the casual visitor, it was difficult to realize that this was the abode of the sick and sorrowful for many of whom the wheels of existence were quickly running down.

[1]Reprinted from the January, 1919, number of the ALUMNAE JOURNAL of the City Hospital School of Nursing, Blackwells Island, New York City.

THE NURSING SITUATION FROM THE PUBLIC HEALTH POINT OF VIEW*

Number of Public Health Nurses Needed To-day Almost Incredible—Critical Study of Subject Now Being Undertaken—Present Curriculum Inefficient

By ANNE H. STRONG, Director, School of Public Health Nursing, Boston, Mass.

In the United States at the present time, there are about fifteen colleges, universities, and other teaching institutions of advanced grade which are offering courses of instruction in the theory and practice of public health nursing. Almost daily, sometimes many times in one day, requests come to the directors of these courses for nurses who have had this special training to fill positions in the various kinds of public health nursing services. For the most part, these positions call for women with organizing and executive ability, and the personality essential to leadership. And the equipment invariably sought includes thorough general education, the best possible hospital training, and in addition a special course in public health nursing.

This greatly increased demand for public health nurses is natural enough, since it is generally recognized that nurses play an essential part in the campaign for public health. Moreover, the campaign itself is developing with enormous rapidity. The feeling now increasingly common in many parts of the country that the sick should be cared for on the basis of their need rather than of their ability to pay is leading to wide extension of visiting nurse services. Even more rapidly, communities are realizing their need for protection from disease, and are showing lively interest in health education, particularly in education directed toward safeguarding the health of babies and children. Thus disease prevention is broadening out into constructive health work, with steadily improving organization of community health agencies. Already many persons regard health as a public right, and are convinced that the means to prevent disease and to build up health must eventually be as common a possession as the opportunity to obtain education in the public schools.

Even before the war, the number of specially trained public health nurses needed was greater than the supply. Today the number needed would, I think, be almost incredible to persons not actually in touch with the work, and we look forward to an increase for many years to come. An effective system of training nurses for public health work has thus become an imperative need, which we must meet, and meet adequately, in the near future. The time and justification for emergency courses and other educational makeshifts of every kind has now happily gone by. A sound, practicable, and efficient training must be planned and put into effect, unless we are ready to assume the responsibility of hampering and delaying work so vital to the welfare of the whole country. We

*Read before the Twenty-first Annual Convention of the American Hospital Association, Cincinnati, Ohio, Sept. 8-12, 1919.

feel convinced that the task however difficult can be accomplished, although it will doubtless require time, money, and intellectual sweat.

Many of us have already given this subject considerable thought, and some of us have been guilty of drawing up schemes of training for public health nurses, embodying our own convictions and experiences up to date. These curricula we have presented, we have heard them discussed with interest, and we have then seen them pass gently into complete oblivion. This procedure I should doubtless be now repeating if it were even a few months ago, and any plan I might have presented would, I feel confident, have eventually met the usual fate.

In spite of ineffectiveness, these attempts have greatly clarified our ideas, and to that extent they have been well worth while. Two reasons largely account for the fact that they have so far led to little in the way of constructive effort. In the first place, they have generally involved financial expenditure for which no money has been available, and in the second place they have been based on personal opinions rather than on objective data, and have therefore failed to carry conviction.

Clearly, we need more facts. To obtain facts we need a critical study of the subject: the field of public health nursing, the functions of the public health nurse, and the existing facilities for training, including both the hospital training schools and the postgraduate courses in public health nursing. The results of such a study, interpreted in the light of modern pedagogy, should give something approaching a scientific basis on which to plan an improved curriculum.

To all of us interested in nursing education, it is a cause for profound satisfaction that such a study is soon to be undertaken. A committee has recently been appointed, with Prof. C.-E. A. Winslow of the Yale School of Medicine as chairman, to conduct the investigation. Many of us believe this to be the most significant forward step in nursing education since our training schools were established.

Within a year we hope to have before us the results of this study, and the recommendations to be based upon it. During the time intervening it would be idle to advocate radical changes in our present system of training. But while we are waiting for further light upon dark places, we shall do well to scrutinize certain facts that are clear before us now. For instance, we know here and now, that well-educated and thoroughly trained public health nurses are much in demand; that this field is daily proving more attractive to well-educated women; that many of the recent college graduates now in our schools have entered in order to prepare for this field of work; that these women are seeking and should have the best possible training with the greatest possible economy of time. We know, moreover, that the curricula and methods of our schools are being challenged in the light of these new needs, which did not exist a generation ago when the schools were founded and their system of training established. And it is an undoubted and most significant fact that the usual course in the hospital training school unsupplemented by further instruction does not prepare nurses for public health work.

It is evident that the hospital course, certainly as now constituted, cannot offer training in preventive work, family nursing, health teaching, and other essentials of the public health nurse's equipment. While I admit that public health nurses can be trained only in part within an institution, I cannot emphasize too strongly my conviction that a strong hospital training is an essential part of the equipment, even for those who ultimately take up work in which bedside nursing is not included. I should regard as a calamity any changes that resulted in weakening rather than in strengthening this part of the training. My very strong desire is to see the usual hospital work very greatly strengthened. There is serious need of such strengthening, for, I might remind you, if we consider not merely a few large cities, but the country as a whole, by no means all of our training schools are of the first rank. Indeed, my personal observation, though unsupported by actual figures, would show that the number of nurses trained in mediocre and poor schools is far greater than the number who have the good fortune to graduate from the comparatively few schools of high rank.

In the great majority of schools, the practical experience afforded is too limited for the nurse who is going into public health work. Every public health nurse needs not only adequate experience in the usual medical, surgical, obstetrical, and pediatric services, but in other services as well—especially in eye, ear, nose, and throat work, in mental and nervous diseases, and in communicable diseases, not excluding tuberculosis, syphilis, and gonorrhea; and she needs good experience in the out-patient department as well as in the wards. We need no further investigation to indicate the need for improvement in the way of more complete practical experience. If it were possible to bring before you the definite information in regard to the training offered by schools all over the country which we have in the hundreds of application blanks now on file at our School of Public Health Nursing in Boston, you would, I think, be surprised to find how few schools offer their pupils anything even approaching a complete experience.

The length of time really necessary to train a student for public health nursing is a somewhat controversial matter, but one that calls for serious consideration. To prolong the course beyond the time actually required for effective training is clearly unjust, not only to the student but also to the public which needs her services. The training at present requires three years in the training school, or not less than thirty-three months, excluding vacations, and an additional academic year of eight months in a postgraduate course, making forty-one months altogether. This period has been shortened by four months in certain schools which have been able to secure one semester of the postgraduate course for a limited number of pupils. We have found this a very desirable arrangement. Unfortunately we are uncertain how long it can be continued, since it has been financed as a war measure.

Forty-one months, or even thirty-seven months in these exceptional cases, is a long time. Four academic years, or about thirty-two months, excluding vacations, is the time ordinarily required for the undergraduate course in a university, for the graduate work leading to the degree of doctor of philosophy, and for courses leading to a degree in law or medicine. The content of courses in public health nursing is certainly not greater than that in courses of training for other professions, and by many it is believed to be less. Since the time actually required now for the training in public health nursing is considerably greater than that required for other professions, we are justified in believing that our present curriculum is inefficient. This inefficiency is even more marked because there are serious deficiencies even in training of this probably excessive duration.

As a matter of fact, we know and need not further discuss the fact that pupil nurses' time is wasted to some extent from the point of view of their own education by

repetition of procedures not demanded by their training. If this waste could be eliminated the course could be shortened somewhat. If, however, it were possible to work out a really intensive training, with a kind and amount of instruction which no school so far has ever been able to obtain, many of us feel that three years would be ample for a far more thorough training than now exists anywhere, providing that the students had the requisite preliminary education. But we are equally convinced that radical reductions in the length of training as it now exists without introducing really intensive work can hardly fail to prove disastrous.

If we wish, as we undoubtedly do, to see college women in constantly greater numbers preparing for public health work, we must be prepared to offer them instruction in both theory and practice at least as substantial as the instruction they would receive in other professional schools. In the past many desirable candidates for nursing schools have been deterred from the nurse's training on the ground that the work is too difficult. Physically the work has been too hard in the past, and is now in schools where excessive hours of work still prevail. But intellectually the training has been far too easy. For this reason also many educated women have been unwilling to enter training schools. The instruction should certainly make intellectual demands no less heavy than those made in any college class room or laboratory. It is unfortunate that many schools are obliged to grade their instruction down to the capacity of pupils who have had only one or two years of high school work. The admission standards still tolerated under the laws of many states are pitifully low for women who are to undertake the responsibility of modern nursing, and totally inadequate certainly for those who intend to take up training school or public health work.

The problem of low standards of admission is of course closely related to the problem of obtaining an adequate supply of labor for the hospital. The fact must be faced sooner or later that the training of nurses and the carrying on of hospital work are not identical: the one is a problem of education, and the other is a problem of administration. In the past it has been necessary to solve the one by the other, and the arrangement has indeed had certain advantages. But the time is coming, and in some hospitals has already come, when the training schools cannot necessarily supply service just sufficient for the needs of the hospital and no more, and at the same time conduct a satisfactory course of training. The problem of obtaining labor for the hospital will require a separate attack and solution, and is outside the scope of our present discussion.

I think you all realize that every single suggestion we have to make for working out a satisfactory training for public health nursing calls for money, and probably for considerable sums of money. We realize also the enormous financial burdens the hospitals are already bearing. Many, we know, are finding their financial situation actually precarious on account of the increased cost of food, labor, and surgical and medical supplies, combined with the constant need of new and expensive equipment. It is plainly beyond the power of the hospitals at this time to provide for greatly increased educational needs from their ordinary funds, and no person with common sense can expect it.

But we cannot alter the fact that education is costly, and without money it cannot be had. This fact is true of education, liberal or technical, elementary or advanced. The cost of the public school system in most cities is one of the largest single items of public expenditure, even with the usual overcrowded class rooms, inferior equipment, and underpaid teachers. In colleges and universities, tuition fees seldom cover more than a part of the cost of instruction, and the rest is provided through endowment funds and gifts, or through state subsidies.

We could multiply illustrations of the high cost of education, and the same high cost exists, though less apparently, in the case of nursing education as in education in other branches. It is our imperative duty to make the public see the financial need of our training schools. Medical schools have been given princely gifts, and colleges for women, both liberal and technical, have been generously endowed. Already individuals interested in public health are contributing to our postgraduate courses. We have faith to believe that our training schools, to which the public owes so great a debt, will not long be the only schools passed by in the giving of gifts.

I think we shall all agree that hospitals have never yet had a chance to show all they are in reality capable of doing for the training of nurses. Hampered as they have been by their lack of funds, by their pressing need for labor, by the fact that the field of education has been to them a foreign field in which they have not been able to utilize the service of experts, they have yet maintained a system of training that with all its deficiencies has supplied able workers to meet great public need; and they have offered an experience which I believe many nurses will agree have been the most valuable experience of their lives, well worth many sacrifices. We are proud of our hospitals, we are proud of our training schools. And we look to them for even greater achievements than in the past, for we believe all things are possible with physicians, nurses, and public working together.

Will Meet at Atlanta Next April

The International Council of Nurses has received an invitation to meet with the American Nurses Association, the National League of Nursing Education, and the National Organization for Public Health Nursing at Atlanta, Ga., early in April, 1920. Miss Lavinia L. Dock, secretary of the International Council of Nurses, says in the *British Journal of Nursing* that this will give an opportunity for going over the international situation and laying plans for a gradual re-knitting of broken threads.

The new developments in nursing connected with the vast projects for public health conservation recently put forth by the Red Cross, and the intimations by high officials of the Red Cross that the new activities shall be directed not only toward public health nursing, but also toward the extermination of war, suggest the possibility of the International Council being overshadowed by larger international meetings in which nurses will wish to take an active part. This extension of public health work will doubtless also mean that nurses must be active co-partners on a full equality with other members of the staff of the new Red Cross International.

Bohemian Girls Learn Art of Cobbling

Cobbling is numbered among the domestic accomplishments by the women of Czecho-Slovakia. Here an American Red Cross worker found two very talented young women in a well-to-do Bohemian family. One of the daughters spoke five languages fluently, and the other was an excellent musician. She was amazed to find that besides going in for the arts the girls also went in for cobbling. They did all their own patching and half-soling and had done it ever since the war made shoes and shoe materials so costly.

PUBLIC HEALTH NURSING IN NEW JERSEY*

Public Health Work Develops From Small Beginning—Mothers Taught Fundamentals of Child Hygiene—Local Boards of Health Cooperate

By CHARLOTTE EHRLICHER, Supervisor of Nurses, New Jersey State Department of Health, Child Hygiene Division.

Many years ago, when the beautiful temples of the famous bridge in Nikko, Japan, were built, it was decided to construct an approach worthy of this sacred spot. So contributions were solicited for the purpose of placing many lanterns of stone, these works of art to form an avenue of great beauty and to cost much money. Among those presenting what they could afford, to help pay for the project, were those who brought small coin, as well as those who brought gold in bags. One man, although not clothed as one possessing wealth, also presented a bag, which, when opened, was seen to contain only seeds. The people, enraged at the supposed levity of the giver, demanded that a speedy and dire punishment be meted out to him. But his pleadings for a hearing were so insistent and so sincere that he was finally allowed to account for his strange gift. This he did successfully. Today this man's gift is an avenue of trees five miles long, creating an approach impressive beyond all possibility of stone lanterns, no matter how costly they might be.

Which is better—to plant a seed which will grow into a tree of great beauty, or to build a lantern of stone? A tree with firm roots in the ground, one so healthy that seeds from it will again grow similar trees in new places—each new tree to have health and strength like the parent tree, to create the same protection with its spreading branches, to endure for many generations—always a thing of joy and a symbol of growth and development. Whereas a lantern of stone will at best shed a feeble light, is without roots to hold or feed it, provides no protection overhead, and is not capable of creating new lanterns.

There is much being done in public health work, and many efforts are being made by means of public funds, private enterprise, individual sacrifice and personal ideals. Some of the work is like the stone lanterns, shedding a little light, but having no firm root, no growth. Other plans are like the avenue of trees, demonstrating life. The plan of the New Jersey State Department of Health, Child Hygiene Division, is surely of the latter variety. Under the direction of Dr. Julius Levy, the first seeds were planted November 1, 1918, and now, in less than a year, healthy growth has been established in every county in the state. Of course there are some people who appreciate a lantern much more than they do a tree, and so in one or two instances the bravely growing little tree had to be transplanted.

Fig. 1. A "well-baby" clinic in a school room, showing demonstration material, literature for distribution, and record cards with card rack.

Fig. 2. After six weeks' sad struggle with the bottle, this baby was returned to breast feeding, and developed from a miserable, little, typical mal-nutrition case into the nice, fat baby shown in the picture.

The staff of the department consists of the director and four supervisors—one for education and extension, one for supervision of midwives, one for supervision of boarding homes for babies and unmarried mothers, and the fourth a supervisor of nurses with assistants.

There are now forty public health stations. The program of the nurse's work varies slightly according to community needs, but the foundation of the work is the same throughout the state. In cities or towns already supplied with school nurses and visiting nurses, a congested locality is chosen and an area outlined where statistics show a birth record of about two hundred babies per year. In this locality some public building is found, such as a school, a library, a community house, a club, or a town hall, where those in control will cooperate to the extent of allowing the use of a room in the building for a consultation station or well-baby clinic.

The equipment consists of demonstration material, literature for distribution, and the record cards with card rack. The nurse gets a daily report of the birth record for her district and visits the baby within five days after birth, bringing with her the baby's birth certificate. She begins to instruct the mother in infant care, the first and most important rule consisting in establishing and maintaining breast feeding.

*Read at the Twenty-first Annual Convention of the American Hospital Association, Cincinnati, Ohio, Sept. 8-12, 1919.

As her work becomes known and her community reveals itself to her, she gradually finds many expectant mothers and the instruction in pre-natal care is established. Visits to the home bring to view defects in older children, poor sanitation and housing, poverty, shiftlessness, and all the other social problems confronting all public health workers. For there is no question that can be brought out by workers in other fields of public health nursing that does not bear on child hygiene directly or indirectly.

In smaller communities, where there is no other nurse in the field, a district is chosen representing about 1,000 school children. The nurse then takes care of the entire group of pre-natal, child hygiene, pre-school and school children. In addition to the visits made to the home, the mothers are urged to bring the babies to the consultation station to have them weighed and measured. A doctor, whose services are voluntary, is in attendance.

The work is entirely educational and preventive. Palliative and emergency work is not included. Results are already in evidence in the cooperation of local boards of health responding to complaints. Cesspools are being cleaned, wells done away with, city water installed, and masonry repaired. One landlord brought down the rent from $17 to $15. Local organizations also aid by supplying milk to nursing mothers, clothes for expected babies, or legal advice to distressed mothers. Babies are being kept on breast feeding or returned to it. Unmarried mothers are not separated from their babies. Homes are cleaner, babies are made comfortable. Everywhere the health ideal is created and cultivated.

Plans for pre-natal clinics are under way. In the meantime, the nurse is credited with the number of pre-natal examinations made by doctors, resulting from the advice given the mother by her. The best argument for the work is that many doctors oppose it, fearing injury to their practice.

Fig. 3. Edward Peterson (colored) and his faithful weekly attendant since he was three weeks old.

SHALL A GROUP OF TRAINED ATTENDANTS BE CREATED?

Question One of Vital Interest to Nurses—New York City League for Nursing Education Discusses Plan—Fear That it Would not Prove Panacea for All Ills

There is probably no subject of nursing interest that is so much discussed at the present time as the proposition to create a group of trained attendants. This is not new, and last year there was such a consensus of opinion among New York nurses, in favor of training attendants, that a large portion of the bill introduced in the New York Legislature was devoted to this proposition. The bill failed, but our interest has been stimulated by a recent report of "The Committee of the New York Hospital Conference" which was appointed to study this problem. The report outlines a course of training of one year, to be given in our general hospitals to women who can "read, write, and cipher." Upon graduating (without examination) these women are to be called "hospital graduate attendants" and are to work "at a distinctly lower rate than the charges of the Registered Nurse," and are "to rely much more than the nurse upon the physician, and must keep in closer touch with him."

The details have been carefully thought out, and if the plan could be made to work, it apparently would solve all the labor problems of the hospitals and relieve the shortage of nurses.

On September 30 the New York City League for Nursing Education held a special meeting to consider the working out of this plan in all its bearings. The League was fortunate in having the Hon. Augustus S. Downing, Assistant Commissioner and Director of Professional Education, to speak from the standpoint of the Department of Education. Doctor Downing spoke at some length and discussed various phases of our problems. To summarize his conclusions:

(1) There is absolute necessity for a state law to license the nurse and the attendant so as to afford protection to the public, as at the present time, not only an attendant, but any one can pose as an "R.N." and practice as such without incurring the slightest penalty.

(2) Hospitals organized to conduct schools of nursing could not establish schools for the training of attendants without special permission from the Board of Regents.

(3) The need for an examination in such practical work and oral instruction as are included in any given course was emphasized.

(4) It is probable that only selected hospitals with adequate facilities, not only for training, but for housing and teaching. two separate groups such as nurses and attendants, would be licensed to do so. Doctor Downing called attention to the fact that any school of known reputation could attract a group of attendants, but by so doing would probably kill its School of Nursing.

(5) The necessity for a correct up-to-date list of all the "R.N.'s" and attendants in this state was emphasized.

The second speaker on the program was to have been Miss Elizabeth Golding, R.N., president of the State Nurses' Association, representing the private duty nurse, but unfortunately Miss Golding was not able to be present.

The third speaker was Miss Ella P. Crandall, secretary of the Public Health Nursing Organization, who spoke from the standpoint of the needs of the public health nursing service. Miss Crandall told of various attempts to train attendants, that were carried on during the war. Wisconsin was one state in which such an effort was made and the following is quoted from Miss Crandall's remarks:

"There are one or two things that bear on what Doctor Downing has said. In the first place, the Board of Regents of Wisconsin did not think it at all necessary to have legislation first, and in consequence I think one-half dozen hospitals in the state undertook to train attendants. Our correspondence showed that in the institutions where training schools were already established, a great deal of difficulty arose, a great deal of misunderstanding, and general dissatisfaction. In one Catholic hospital where there was no training school, the Sisters managed the training of attendants with fair results. But out of that $25,000 and several hundred candidates, the number who completed the course and went into service as attendants was so small that there was not the slightest effort to repeat the course in that state; yet in that state the nurses favored it and aided it in every possible way."

Miss Crandall further stated:

"When I speak of training attendants for public health service, we have in mind quite a different person, and that has been the difficulty—when we trained the worker we wanted a different kind of service—the person who takes the place of the wife, the daughter, or neighbor during the interim of the visits of the nurse. And that person needs to have her training so that it will equip her for family care in general. We do not wish the person who is thinking first of the sickness and care of the patient, and consequently we are looking for something much more simple than the hospital trained attendant, some one who would actually take over a considerable part of the sick person's daily duties.

"Chicago, Cleveland, and Boston report that the practical test of the attendant service has not been satisfactory, and they believe there is a better way to furnish nursing care for the middle class and the poor than by having what was the slogan in Michigan, namely 'a poor nurse for a poor man.' I believe there is a better answer. I don't pretend to say how it can be worked out. but there certainly is a worthy suggestion in the idea of state health insurance, namely, a minimum of nursing care accorded to every citizen's need, and not according to his pocketbook, supplemented by the unskilled care such as the wives and mothers have been giving."

The next speaker was Miss Elizabeth C. Burgess, R.N., state inspector of nurse training schools, New York, who discussed briefly the effect the report of the Hospital Conference Committee had had upon hospitals in the state. In some parts of the state the impression prevailed that many hospitals in New York were training attendants. Many of the small hospitals felt they should fall in line with what the large hospitals were doing, and asked for advice regarding the matter.

Miss Burgess gave some interesting statistics which showed a steady rise, extending over a period of several years, in the number of pupils in many hospitals. It would seem that the present shortage of applicants is the inevitable result of the sudden and complete cessation of the advertising by which we benefited during the war.

Miss Anna Goodrich summed up the discussion:

"I am sure that I have very little to add to this very interesting discussion. From my own part, I feel that it has been a steady rise of encouragement.

"Doctor Downing says that we shall not recognize a course for attendants until we have registered or licensed the nurse and then we will license the attendant. Miss Crandall points out clearly the type of person we really want, who has been found to be successful in the visiting nursing associations, rather than the pseudo-nurse, and Miss Burgess shows us these statistics which would seem to evidence a steady rise in the number of students.

"This is not a very discouraging presentation of the facts as far as the nursing situation is concerned. It is discouraging that such a program should be outlined after three years of effort to safeguard the care of the sick wherever they may be found, in the institution, in the private house, or in the homes of the poor. I can never be discouraged because there are certain outstanding facts which I repeat and say to myself continually.

"As recently as 1863, and that is very far back to some of you, when we had a Civil War, there were no nurses to be obtained at all, and the 2,000 women who rendered service, according to the medical history of the time, were not useful as nurses, but rendered valuable service in the care of the linen, and in the diet rooms. In the time of the Spanish-American War, the then Surgeon General reports that he at once enrolled 1,500 nurses, that during the period between the Civil and the Spanish-American wars, the schools for nurses had come into existence, and in that period the trained nurse had been developed, and while it was the consensus of opinion of those who wrote the medical history of the Civil War that the women did not render any efficient nursing service, it was the consensus of opinion that the services rendered by the trained nurses of the Spanish-American War had been of inestimable value.

"Whatever service they rendered, or have not rendered, in this present war 22,000 were not adequate; 22,000 were actually used and this does not include those in the Navy and those in the Red Cross, and you know they were calling for a personnel of 50,000 graduate nurses. When the Surgeon General called for that, it was at the insistent demand of the men in the service on the other side, and somehow or other this group of people must have made good. I can't be afraid in view of the fact that there is this persistent cry for more nurses. It is not that the country has less nurses, but the people want better nurses. Nurses are wanted and qualified nurses at that.

"Now there is a second point I want to make: that the young women of to-day, of the type that should go into nursing, are too intelligent to take that kind of work. The right kind of person will not enter it. If there is one thing war taught us about women in its relation to service, it is this—they required trained service of all the people they enrolled. When they took reconstruction aids what did they do—turn to the elementary schools and take them without preparation? They communicated at once not only with the educational institutions of the country, but with those of the highest grade. They demanded that the colleges open courses at once and they enrolled college women as rapidly as possible for these courses. The Government stood firm on this decision in the midst of the great war and when we were already hit for a dearth of nurses, they stood for three years' training. When such a thing was stood for by our country in war, when we were facing a shortage that nobody knew better than the authorities in Washington, I don't feel that we need to be alarmed by this report. . . .

"Wonderful things have come to pass in the last two or three years. Two things have happened that seem to me to make us very hopeful, one is that the country has

gone for prohibition, and the other is that the women in New York State have the vote. I never supposed that these two things would come in my lifetime and before I die I hope to see the requirement of four years of high school education for every school of nursing in the United States. I think health insurance is going to be the trying problem we have to face, the maximum amount of sickness care regardless of the pocketbook of the individual.

"If we get this message over, if we can't convince the men, let us go for the women, they understand the child and the sick, and I believe we can work now very effectively toward legislation that will give the people the information concerning the person they take into their home as nurse, and I am quite sure that when they have that information we need not worry about that other group."

After some further discussion, the following resolution was presented by Miss Amy Hilliard as voicing the convictions of the Executive Committee of the League:

"WHEREAS, there is a need for trained attendants for the care of patients suffering from chronic and incurable diseases, and for those convalescing from neuroses, psychoses and other illnesses, and

"WHEREAS, such attendants have been trained in certain hospitals, sanatoriums and visiting nurse associations; and

"WHEREAS, many of these trained attendants are practicing nursing as trained nurses,

"Be it therefore

"*Resolved*, THAT the New York City League for Nursing Education goes on record as approving the training of attendants, if this training is not given in a hospital which maintains a Training School for Nurses, and if, for the protection of the public, they be prohibited from practising nursing as trained nurses, and if they be licensed as provided for in Senate Bill 597 of the 1919 Legislature."

It was moved by Miss Greener and seconded by Miss Stewart that the resolution be adopted.

As a result of our discussion it would seem that the training of attendants as suggested in the report of the Committee of the Hospital Conference would not prove a panacea for all our ills, but would inevitably increase the present unrest in nursing schools, and add many new difficulties to those with which hospitals are grappling at present.

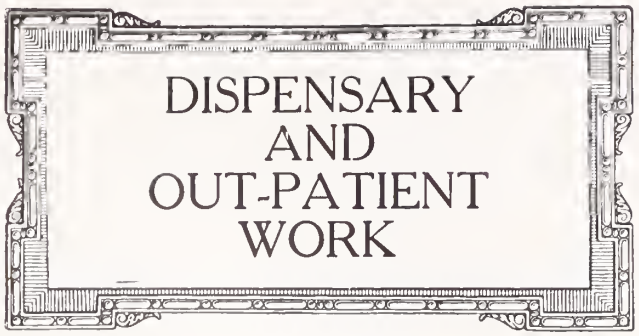
Knowledge of First Aid Proves Invaluable

A sign board yielded splints and an old coat became a sling when a Red Cross First Aider showed his skill in an automobile accident recently.

A party of six men were taking an automobile trip from Philadelphia to Manheim, Pa. In attempting to pass another car on a muddy road their automobile turned turtle, throwing the occupants from the machine and injuring one man seriously.

The one person in the party who knew first aid principles was Hugh Lane, a telephone man, who had taken the Red Cross First Aid course in the factory. Seeing that one man had a broken arm, Lane ran into a nearby field and obtained splints from a sign board. In the absence of triangular bandages he tore strips from a shirt and used a coat for a sling. After bandaging the minor cuts received by others in the party all proceeded to a physician, who told them that the First Aid treatment rendered had been invaluable—that quick recovery would follow what might have been troublesome cases.

Incidents can be cited indefinitely where First Aid has saved lives and suffering, especially in sections where large industrial plants flourish. The workers are protected by First Aid, and to the employer First Aid means fewer accidents, and it means money saved.



Conducted by MICHAEL M. DAVIS, Jr.
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Please address items of news and inquiries regarding Dispensary and Out-Patient Work to the editor of this department, 25 Bennett street, Boston, Mass.

MASSACHUSETTS DISPENSARY LAW PROVES FACTOR FOR GOOD

Frees State of Undesirable Organizations Which Were Depriving Poor People of Money and Health—Ten Quack Dispensaries of Boston Put Out of Business

It is good general policy that an organization which does any form of public work should be under some form of public supervision. This principle has been too little recognized in America, where all kinds of organizations and institutions spring up for desirable and undesirable purposes and pursue their course unchecked, except when some gross evil challenges the attention of the authorities. More and more states and cities are now recognizing the need for placing under public supervision medical institutions such as hospitals, dispensaries, sanitariums or maternity homes. Ohio furnishes a recent and notable example of this tendency in its newly enacted law requiring the State Department of Health to license all hospitals and dispensaries.

In the matter of dispensaries the two difficulties faced by the public have been the activity of the bad and the inefficiency of the good. The quack dispensary or medical institute is an example of the one. There have been too many examples of the other. New York is the pioneer state to have a licensing law. Twenty years ago the New York State Board of Charities was required to license all dispensaries, the law having apparently been designed largely with the purpose of excluding from treatment those patients able to pay private physicians. The maintenance and development of high standards of dispensary administration were little considered. The more recent activities of the New York State Board of Charities, however, have given much attention to this. A few cities, notably Chicago, have recently passed local Dispensary License ordinances. In Chicago the authority is vested in the Department of Health.

This after all appears to be the proper principle. An organization like the dispensary, concerned with medical and health work, should be under the supervision of that department of the government which is professionally in the same field.

The Massachusetts Dispensary Law, enacted in 1918, was referred to in the "Dispensary and Out-Patient Work" department of THE MODERN HOSPITAL shortly after it went into effect. A long enough time has now elapsed to enable some results to be shown. Those interested in dispensaries throughout the country may well look into this.

The Massachusetts Dispensary Law (Chapter 131, Gen-

eral Acts 1918), as may be remembered, defined a dispensary as follows:

"For the purposes of this Act a dispensary is defined to be any place or establishment not conducted for profit, where medical or surgical advice or treatment, medicine or medical apparatus, is furnished to persons non-resident therein; or any place or establishment, whether conducted for charitable purposes or for profit, advertised, announced, conducted, or maintained under the name 'dispensary,' or 'clinic,' or other designation of like import."

It will be noticed that under this definition a dispensary which is of the ordinary type, operated as a charity, must be licensed, and also an organization which is doing similar work, but is organized as a non-profit-making pay clinic or even as a private profit-making enterprise. The kind of work done, caring for the sick and endeavoring to prevent disease, is the determining factor, not merely the limitation of service to some particular class of a community. All such dispensaries must be licensed by the State Department of Health, except clinics conducted by the United States government or by authority of the Commonwealth of Massachusetts. Licenses expire at the end of the calendar year in which they are issued, and may be renewed only upon application. A fee of $5 is charged for each license or renewal "except to incorporated charitable organizations which conduct dispensaries without charge and which report as required by law to the State Board of Charity." The Public Health Council of the State Department of Health is empowered to make rules and regulations in accordance with which dispensaries are to be licensed and conducted. In other words, dispensary methods and standards may be defined and prescribed. It is prohibited that any particular school of medicine should be specified in any requirement for the conduct of a dispensary. The Department of Health is empowered to visit and inspect dispensaries and to revoke the license of any dispensary after thirty days' notice, and an opportunity for a hearing, if desired. Suitable penalties for violation are provided.

Putting the Act into effect required that the State Department of Health prepare and issue applicatien and licensing blanks and make an inspection of all the dispensaries in the state. The results have been as follows:

Fifty-six dispensaries and out-patient departments of hospitals have received licenses for the year 1919.

Six have been refused licenses on the ground specified in the law, that their operation was not deemed compatible with the public interest.

Four dispensaries closed up previous to the issue or refusal of a license, probably because they anticipated that no licenses would be issued to them.

Previous to the passage of the Law, there had been for several years complaint of a number of dispensaries in Boston, some of which were nominally conducted as charities and were soliciting funds as such, and some of which were frankly commercial enterprises. Poor sanitary conditions were one source of complaint, but a low quality of service, if not the absolute defrauding of patients, was the more serious charge. These complaints were given voice by the Boston Chamber of Commerce in its weekly publication, and from time to time in the public press. The first and most striking effect of the operation of the Massachusetts Dispensary Law has been to put out of business ten undesirable or quack dispensaries—all in the city of Boston. There was, for instance, a dispensary with large signs in several languages describing its clinics and facilities, entitled "The Harrison Avenue Dispensary," and almost exactly across the street from this was another dispensary with sign equally large and impressive called "The Original Harrison Avenue Dispensary." The rest suggests itself. Both of them were denied licenses. It is interesting to know that two of the six institutions that were refused licenses requested a hearing to which they were entitled by the law, but they did not appear on the date set. One of the fifty-six dispensaries which received licenses was at first denied the privilege, but later applied for a hearing; upon which, on the showing of facts so discolsed, a license was issued.

Four "dispensaries" closed up and went out of business after they were informed that they must be licensed and inspected.

The State Department of Health, pursuant to the authority granted under the law, has issued rules and regulations governing dispensaries as follows:

1. A dispensary shall be located in a suitable situation, shall occupy a sufficient number of rooms which shall be adequately ventilated and lighted, and shall have reasonable access to adequate sanitary conveniences.
2. The equipment for advice and treatment of patients shall be adequate.
3. Whenever female patients are admitted a female attendant shall be on duty.
4. A statement of the conditions of admission of patients, the schedule of charges made, and the hours during which the dispensary is open for patients shall be conspicuously posted.
5. Such clinical record of each patient as the State Department of Health prescribes shall be kept on file and shall be open at any time to inspection by the State Department of Health through its agents.

It will be seen that these standards are of a very general character, leaving to the State Department of Health to determine what "adequate" equipment means, and what shall be considered as a sufficient number of rooms or "suitable" medical records. In the early operation of a law of this type, however, it may be wise to have standards of a general nature, and leave their specification to the working out of time.

This Law is thus far construed as applying only to dispensaries treating the usual general diseases and not to the public health clinics, caring for tuberculosis, or limiting themselves to preventive work for babies and young children. The tuberculosis dispensaries in Massachusetts are, however, under the regulation of the State Department of Health and have been for a number of years. The venereal disease clinics of the state are also under special regulation as part of the war-time program, which was made effective through the Kahn-Chamberlain Act. Ultimately, no doubt, the relation between the new general law licensing dispensaries and the laws or regulations governing the special dispensaries and public health clinics will be worked out and the whole system unified.

A license law can be made much more than a passive instrument useful for prosecuting evil doers after they have done their deeds. By suitable inspection, visitation, and advisory service of the inspecting and expert staff, a license law can be administered so as to be a stimulating and developmental agent in medical and health work. Such we may hope the Massachusetts Dispensary Law, under the administration of the State Department of Health, will become. The state and particularly the city of Boston have already been freed from the operations of a number of undesirable organizations which were depriving poor people of thousands of dollars yearly and risking or ruining their health. A good beginning has been made.

Never speak well or ill of yourself; if well, men will not believe you; if ill, they will believe a great deal more than you say.—Eastern proverb.

DEPARTMENT OF DIETETICS

Conducted by LULU GRAVES.

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HOW DIETITIAN MAY BRING CHRISTMAS JOY

Holiday Decorations, Special Menu, Attractive Favors Brighten Day for Everybody in Hospital—Give Valuable Suggestions for Christmas Trays

"Now all our neighbor's chimneys smoke
"And Christmas blocks are burning,
"Their ovens they with bak't meats choke
"And all their spits are turning."

The holiday season is one of the occasions when by common consent the rigorous life of the hospital is somewhat abated. From the time the first plans are begun until the last of the decorations are removed, the spirit of Christmas pervades the hospital as completely as it does the home, and in no place is the spirit of Christmas as interpreted by Jacob Riis more applicable than in the hospital:

"Santa Claus is the spirit of Christmas, and ever and ever so many years ago when the dear little Baby was born after whom we call Christmas, and was cradled in a manger out in the stable because there was not room in the inn, the spirit came into the world to soften the hearts of men and make them love one another. Therefore, that is the mark of the spirit of this day. Don't let anybody or anything rub it out; the rest does not matter."

Where could be found a finer demonstration of the softened heart, or a better indication of love for one another than is found in the eager, happy manner in which every member of the hospital family enters into the preparations for making Christmas day a joy to every patient in the house as well as to each other? Hours "off duty" and evenings are spent among forests of "greens" and mountains of ribbons, gay papers, and all the other things which enter into the decorations, making of gifts, and numerous other little delights of the day. Evidence of this is shown in the accompanying contributions from dietitians, not only in the expressed aims of Miss Eckman and Miss Deaver, but also, in the great amount of thought, time, and effort given by Miss Gladwin and members of her department, and by Miss Hyde's idea of grouping her people in such a way as to make for congeniality. These are but a few of the many dietitians whose uppermost thought for many days is to provide a real Christmas celebration for the hospital family.

Almost from the birth of Christianity, the annual observance of the nativity has been largely in the form of a festival. From the palace of the king to the lowliest hut of the peasant, riotous joy was prevalent and "all but the cooks kept holiday."

One of the manifestations of rejoicing and worship which has come to us from the earliest days is the decoration of our houses with evergreens and red berries. Today this same elaborate use of Christmas colors is extended to make the food and food service fit into the plan as a whole, and it is as true of the hospital service as it is of the home. Holly is the plant which is preeminently the symbol of Christmas, probably because of its glossy green leaves and vivid red berries. Mistletoe is almost universally associated with holly. In ancient times mistletoe was supposed to have the power of driving away evil spirits, and medicinal properties were also attributed to it. Of late, the red poinsettia has become very popular for decoration at this season. The laurel was thought by the Romans to be a symbol of peace, victory, and joy, sometimes branches of it were burned with the idea that prophetic signs were to be found in the curling, cracking leaves. The rosemary was used for fragrance, though to it was ascribed several virtues, one of these being "to clear the head, strengthen the memory, and make appeal to the heart." These and many other forms of green and red are used effectively on tables, trays, and as garnishing for individual service. Supplemented by foods with the natural colors, red and green, and foods which readily lend themselves to coloring, many possibilities are offered for carrying the scheme through the entire service.

Care should be taken, however, to use only pure coloring materials, such as fruit juices or harmless vegetable colors.

Following are a few of the things which have been done in hospitals at Christmas time, as told by the dietitians. With one exception, only large hospitals are here represented, though some of the suggestions may be adapted to the small hospital.

The menus given are all for patients receiving full diets, though they are, in the majority of cases, sufficiently elaborate or varied to permit the selection of as much food as should be given to the patient receiving a soft diet, or one which is in some other way restricted, especially if soups, or broths, mashed or strained vegetables, and a frozen dessert, containing no solid fruit or nuts, are included on the menu.

Who could associate gloom with a Christmas spent in a hospital where such enthusiasm and energy are found as are here shown? Miss Marguerite Deaver of Mt. Sinai Hospital, Cleveland, writes:

"If I can offer any little suggestion that would help to make some sick person a little less homesick on what should be the happiest day in the year, I am delighted.

"These are some of the ideas I have actually carried out in a 200-bed hospital, and I have never been able to decide who enjoyed them most—the patients or myself."

SUGGESTIONS FOR CHRISTMAS TRAYS

On Christmas Eve a nice little custom is to place a miniature Santa Claus on each tray. These can be made of clothes pins and red crepe paper with very little expense. Make a dress of the paper longer than the clothes pin, so that it will stand alone; trim it with white belt around the waist. Paste a little red cap trimmed with white on the head and paint a face on the side of the head on the pin, then arms with white paper hands, and a cotton beard pasted on completes our Santa. These are a delight to the patients, who invariably take them home.

Christmas greeting on the breakfast tray seems to start the day right, for it makes the patients feel that they are not forgotten, even though they are away from home.

MENU

BREAKFAST

Grapefruit — Cream of Wheat

Bacon — Toast

Tea — Coffee — Cocoa — Milk

DINNER

Tomato Bouillon — Wafers

Celery — Ripe Olives

Roast Turkey — Cranberry Jelly

Mashed Potatoes — Spinach

Marshmallow Salad

Lemon Ice — Cake

Tea — Coffee — Cocoa — Milk

SUPPER

Oyster Stew — Wafers

Bread and Butter Sandwiches — Jelly and Nut Sandwiches

Apple Relish — Christmas Jelly

Tea — Coffee — Cocoa — Milk

Rather than serve the grapefruit plain, cut in the form of a basket, remove sections from membrane and refill basket with sections. Garnish with a maraschino cherry. Tie a small bunch of holly on the handle. Serve in a dish of crushed ice or on a plate with a doily.

This is such a pleasant little surprise, that the forenoon passes before one realizes it, in anticipation of the dinner tray. This should be the crowning glory of the day. I think the patients should be made to forget that they are ill and have a dinner as much like home as possible.

Little fluted paper cups covered with a frill of green and red crepe paper with a bit of holly on the handle and filled with homemade candies add much to the dinner tray.

MARSHMALLOW SALAD: *Serves Six*

Ingredients:

1 cup marshmallows cut in quarters
1 cup Hawaiian pineapple cut in cubes
1 cup green grapes seeded and skinned
¾ cup double cream
½ teaspoon paprika
¼ teaspoon salt
3 tablespoons lemon juice
¼ cup English walnuts or pecans broken in pieces.

Method:

Add salt, paprika, and lemon juice to cream, and whip until stiff. Fold in the marshmallows, pineapple, grapes, and nuts.

Make a box by tying together single saltines with red and green ribbon. Line with leaf lettuce and add salad mixture. Garnish with a maraschino cherry.

Star cookies iced and outlined with chopped candied cherries may be served with the lemon ice.

Supper should be light and I think the one suggested above will satisfy most any patient.

Sandwiches may be cut star shaped and tied together —the two kinds—with red or green ribbon.

APPLE RELISH

Select nice smooth apples of uniform size. Core and pare. Dissolve one cup cinnamon drops in one cup boiling water. When candy is dissolved, drop in the apples and cook until tender, turning frequently, so that they will be evenly colored. Remove from syrup and fill cavities with a mixture of equal quantities English walnuts, dates, and figs ground. Finish with a spoonful of whipped cream.

CHRISTMAS JELLY

Fill rather deep individual moulds one-third full of lemon jello tinted green. Set away to harden. Add cooled strawberry or raspberry jello sufficient to fill mould two-thirds full. Set in cool place. When hardened, fill the mould with the remainder of the tinted lemon jello. (This should be made the day before Christmas.) Serve on a plate containing a doily. Garnish with holly. Each layer must be thoroughly set before next layer is added or they will not show up nicely.

Miss Ellen Gladwin, Jefferson Hospital, Philadelphia:

"Last year for our Christmas trays we had a good-looking Santa Claus cut from paper napkins, pasted on card board and wishing each patient a Merry Christmas. Our fruit was grapefruit cut in fancy basket form with handles lined with red crepe paper and a sprig of holly for each tray.

"Dinner trays had holly, tiny baskets trimmed with red and green crepe paper filled with home-made mints and salted nuts, and hand-painted tray cards. For supper we used the tiny red candles fixed in a small piece of potato and covered with green crepe paper, and also a "Good night card." In general, the trays for the day represented the real Christmas spirit with color combination of food as far as possible to harmonize with decorations.

"We make all our little favors—my assistant paints the fancy tray cards usually—and we spend considerable thought making the trays look attractive for most of the holidays."

Miss Bertha Hyde, Cincinnati General Hospital, Cincinnati:

"In the service building we decorated, of course, with lots of holly—both on the electric fixtures and on the tables, putting a sprig at each place. We covered all the lights with red or green crepe paper. We grouped the people together, setting up fewer tables so that there was more congeniality.

"We made a generous supply of home-made candies in our diet kitchen—chocolate drops, nut fondant, walnut brittle, peppermint drops, and we also salted peanuts.

"Our menu as near as I remember it, was:

Roast Chicken — Dressing

Cranberry Sauce — Dutchess Potatoes — Peas

Waldorf Salad

Plum Pudding — Hard Sauce

Salted Peanuts — Candies

Coffee — Rolls

For supper we had a large dish of fresh fruit on each table. This meal was light and mostly cold.

"In our wards we served stewed chicken and gravy with dumplings; mashed potato, stewed corn, cranberry sauce, and ice cream. For our children's wards, we made cookies in various shapes—ducks, chickens, hearts, and crescents.

"Our special trays received much the same as our interns had. They were decorated also with a sprig of holly and were made as dainty as possible.

"I had thought this year of having just two long tables, one for the interns and one for the other people who eat in the dining room—students, clerks, etc. I think I shall put red candles on them, kept burning during meal time."

Miss Florence Smith, Presbyterian Hospital, Chicago:

"We begin our celebration early Christmas morning. The nurses gather at 5 o'clock and pass through the corridors singing Christmas carols. Christmas greetings are put on the breakfast trays. We try to carry out a red and green color scheme for our menu. Last year our Christmas cakes pleased the patients very much. We used our usual cup cake recipe, divided the recipe into three equal parts, added green coloring material to one portion and red to another portion, leaving the third white. The pans were filled with a mixture of the doughs, making a little marble cake of red, green, and white. These cakes were iced and rolled in shredded cocoanut.

On top of each cake was placed a red candle holder and tiny red candle. The candle was lighted when the tray was sent to the patient."

Miss Rena Eckman, Foote Hospital, Jackson, Mich., one time dietitian of Massachusetts General Hospital:

"I think it does a great deal of good to let down the bars and be human. An extra good 'feed' is always given but to fix up things and add something beautiful to every hospital patient's experience on that day goes a long way toward unifying the institution, not to mention the relief a change of thought brings to even the humblest employee. In the Massachusetts General Hospital every patient received a Christmas box. On one occasion, I happened to hear what this meant to a woman who was far from home. To think that the hospital remembered her was something almost unbelievable. The 'visiting ladies' always performed the service of doing up the boxes for the patients on the day before Christmas."

Miss Verna Chapin, Hahnemann Hospital, Rochester, N. Y.:

"The florists sent in a liberal supply of holly and ground pine, both loose and in wreaths, and this was distributed throughout the hospital and nurses' home.

"Various individuals and organizations contributed enough turkeys, apples, cranberries, and squash to provide an ample regulation Christmas dinner for all patients, nurses, and employees.

"For supper the whole house had oysters. Christmas morning at 6:30 some of the nurses went through the different wards singing pretty Christmas carols."

Miss Sate Harriss, Massachusetts General Hospital, Boston, Mass.:

"I am enclosing the private ward menu of 1917, as last year's menu was extremely simple on account of conservation necessities. The Cucumber Japanese, I thought were particularly good though, of course, not exactly a hospital dish, in fact, many of the recipes I think of to send you are not suitable for the average hospital. The Phillip's House (private ward) is run more like a first class hotel than a hospital and is, I am afraid, rather extravagant.

CUCUMBER JAPANESE

Shred cucumbers lengthwise very small, like shoe string. Serve on bed of lettuce with French Dressing to which has been added chopped dill pickle and beet pickle

GELEE A L'ANDREA

Make two portions of jelly, one flavored with maraschino (color, red) and the other with mint (color, green.) Mould in a square pan alternately layers of green and red. When chilled cut in cubes, garnish with whipped cream and red cherries and angelique.

Miss Elizabeth Ross Owen, Highsmith Hospital, Fayetteville, N. C., writes that in this small southern hospital they do nothing unique in serving food. She decorates the trays with sprays of holly, serves puddings in individual molds, and freezes ice cream in baking powder cans. The cream is sliced and leaves of holly pressed into the slices, or small red peppermint candies are scattered through. While Miss Owen feels that she is doing little at Christmas time which is worth telling about, we know she is doing a splendid piece of work in the south. A paper which she read at a meeting of the North Carolina Medical and Hospital Association early in the season attracted much attention from the members of this association, and created a great deal of interest in dietetics and dietitians among hospital superintendents and medical men. Miss Owen has been interested in trying to form an organization of dietitians in the south. Though she may be modest about her Christmas activities, her work throughout the year has the "for one another" spirit.

Miss Irene Willson, Akron City Hospital, Akron, Ohio, contributes this most practical "help": "It has been brought home to me that the breast of the turkey is always very dry on account of its position in the roaster, and I have proved that to reverse this, namely by placing the V of the breast between two supports and allowing it to be immersed in the liquid during the entire process of cooking—only to be placed in the old position for the required length of time to brown—makes a suprisingly great difference in the flavor."

Fig. 1. Oysters a la Casino.

Miss Bessie Brinton, Lakeside Hospital, Cleveland, Ohio:

"In addition to the regular Christmas dinner we made very pretty baskets of red crepe paper for the patients' trays. Nuts and raisins were served in these. For many years members of various ladies' committees have provided dainty cards or greetings for the trays. Because of the shortage of sugar no candy was made last year; previously mints, marshmallows, stuffed dates, and other forms of confection have been prepared in the diet kitchen by the student dietitians and student nurses. These have been made of materials suitable for the patients as well as for the nurses and doctors. The great amount of beating required for the marshmallows was done by the electric power dough mixing machine.

"Last year a buffet luncheon was served to the nurses and doctors in the recreation room of the nurses' home. A grate fire and the informal service helped to end the day in a jolly manner for those who had been devoting their time to making Christmas merry for others."

A favorite dish for supper on holidays and Sunday evenings seems to be oysters in some form. Two ways which are somewhat "different" are here given, with illustrations. In some cases, the red pepper would have to be omitted from the first recipe.

OYSTERS A LA CASINO

Place oyster shells with oysters on a broiler and over each oyster lay a slice of thin bacon and two or three strips of sweet red pepper. Broil until the bacon is crisp. Serve at once with lemon. This dish is especially delicious.

PIGS IN BLANKETS

Take large oysters and season with salt. Roll each one in a very thin slice of bacon, fasten with toothpicks, and place in a pan in a hot oven until the bacon is crisp.

Dainty sandwiches, and wafers and cheese are desirable

to serve for the light evening meal, or at other times to patients needing mid-afternoon lunches.

WAFERS WITH CHEESE

Spread wafers with jelly or jam. Mix cream cheese with cream mayonnaise. Mold into small balls and place one on each wafer.

Fig. 2. Wafers With Cheese.

SANDWICHES

Cranberry ice is sometimes found to be a happy change from the more commonly used cranberry jelly. In this recipe syrup may be substituted for part of the sugar.

CRANBERRY ICE

8 qts. cranberries.
4 qts. water.
4 qts. sugar—(Syrup may be substituted for part of the sugar).
Juice of 12 lemons (1½ cup).

Cook cranberries in water. Force through a sieve, add one-half quart water. Add sugar and lemon juice. Freeze to a mush.

Candies and nuts having the "homemade" flavor are always appreciated. Nuts salted by this method do not have the irritating feature of salt sticking to the nuts:

SALTED ALMONDS OR PEANUTS

1 pt. water.
½ cup salt.
1 cup almonds.
2 tablespoons butter or olive oil.

Fig. 3. A Plate of Dainty Sandwiches.

Blanch almonds. Heat salt and water and when boiling add nuts. Cook eight minutes. Drain and place them in a baking pan, put butter over them in small pieces, then bake until a delicate brown, stirring frequently. All fat should be absorbed. Pour on brown paper and leave till cool.

Candied orange or grapefruit peel are convenient to have always in supply. They are equally good whether used as a flavor or a garnish.

Cut the soft rind into long narrow strips. Soak strips for 24-36 hours in a brine made of two tablespoons salt

Fig. 4. Pigs in Blankets.

to one quart of water. Remove from the brine, boil in water enough to cover until it is soft. Drain, and cook until transparent in a syrup, and roll in granulated sugar. Cooking until transparent may be done in commercial syrup, if one wishes to conserve sugar.

Oranges and grapefruit are favorites in salad at all times, especially when other forms of fresh fruit are not easily obtained. A touch of Christmas may be given if the fruit be pared, divided in sections, and each section

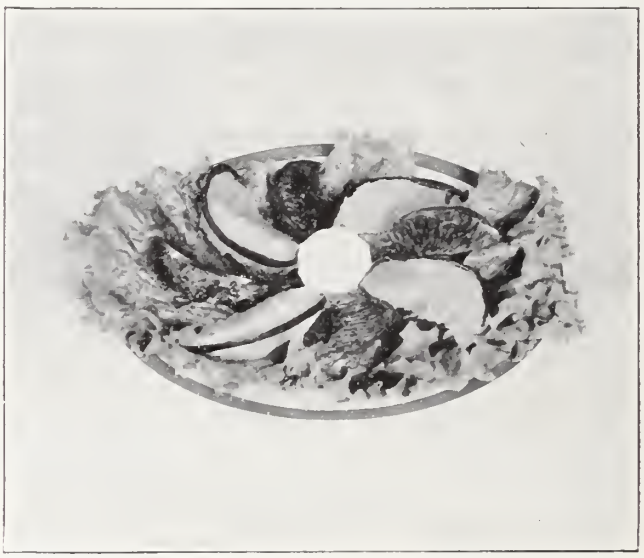

Fig. 5. Orange and grapefruit salad.

freed from the tough membrane. Three sections of each may be arranged, alternately, on lettuce, extending out from the center. Along the outer edge of the sections of fruit thin strips of green pepper and pimento may be laid—green pepper on the grape fruit and pimento on the orange or vice versa. Unless mild, sweet pepper is used, it should be parboiled. Parboiling softens the pepper so it will curve around the sections of fruit more easily.

Beautiful Melodies Induce Sleep

Lullabies for soldiers whose minds are sick! It's a new idea, one of the many schemes hatched by Red Cross musical directors at military hospitals in this country, who are trying to bring men back to themselves through the medium of beautiful sound. At Fort Sam Houston, Tex., an accomplished woman pianist, with a trio (piano, violin and 'cello), plays three times a week at bedtime.

CANDY DOLLS FOR CHRISTMAS DELIGHT CHILDREN

Dolls Made of Tarlatan and Stuffed With Candy Are Warranted to Bring a Smile from the Grouchiest —Directions for Making Them

By JESSIE A. BOYS, Instructor in Home Economics, Cornell University.

Instead of the tarlatan Santa Claus or Christmas stocking filled with candy and other goodies, why not make dolls for the children's tree? They are newer, different, quite appealing and, to the "grown-ups," laughter provoking. To be sure, the youngsters may not appreciate the extra work put upon the creations, but do they ever realize that such things mean time, attention to detail, pricked fingers, and possibly ruffled dispositions caused by the pressure of duties and the perversity of the inanimate? Anyway, you will get heaps of fun for yourself in making a few, and will agree that it is well worth the time and money to feel the glow of pleasure, and to experience the irresistible mirth which accompanies the making of these strange dolls, for they have somewhat the effect of "Happy Hooligan." You just must smile when you look at them.

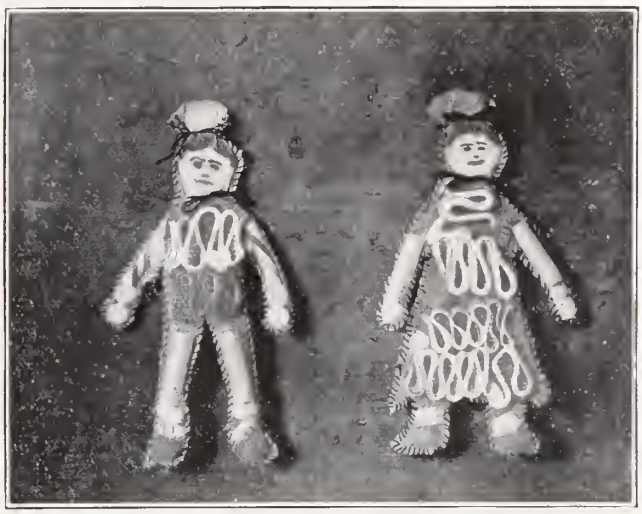

Fig. 1. A "Candy Kid" and His Lady Friend.

The boy doll in the illustration is cut from white tarlatan and his "lady friend" from blue; but she could just as well be a "pink lady" or a "sunshine girl." Colors for the male of the species are permissible also, for, in this case, vanity is desirable.

A pattern can easily be cut eyen if a ready made one is not available. The pattern used for the dolls illustrated measures sixteen inches tall and eleven inches from hand to hand. Arms and legs are about one and a half inches broad, while the girl's skirt can be wide or narrow according to Dame Fashion's decree. It takes two pieces, of course, for each doll, and a yard of tarlatan will make three or four dolls. The pieces are sewed together with heavy colored thread, that used for tying Christmas packages giving an attractive glitter by artificial light. The overcasting is continued around the entire outline with the exception of the top, above the head, which must be about four inches across. These edges are folded in and a ribbon or cord tied around above the head, with a loop for hanging it upon the tree.

The feet can be of almonds, Brazil nuts, peanuts, or an appropriately shaped candy. Arms and legs are best of stick candy, though other long candies can be used; ankles and wrists are of smaller candies, some giving the effect of striped socks; hands are difficult to simulate but heart shapes are not bad. Bodies are most economically filled with the looped ribbon candy; the face is a large peppermint cream on which hair and features are delineated with melted chocolate and pink frosting. The peppermint is backed with a chocolate wafer if the individual be a brunette, or a lemon snap if a blond.

The filling is more easily accomplished if it be done as the sewing progresses, and it may be necessary to provide a necktie to hold the head in a proper position. Extra additions may be made. For instance, the illustrated boy has a heart and the girl a pocket; you may not recognize it, but she insisted upon having a pocket on the right side of her waist. Perhaps she gave her heart to the boy, and she has none—who can tell? They have wrist watches with engine turned cases. The boy is more opulent and has two, and looks as if he had snowballs in his hands.

I hope we all will have the opportunity to make snowballs at Christmas time with all the attendant fun, but if not, we can at least make a few of these mirth producing dolls for children we know, and for more we do not know who may have little with which to make merry.

REPORTS OF SEPTEMBER AND OCTOBER MEETINGS OF THE CHICAGO DIETETICS ASSOCIATION

September Meeting

The Chicago Dietetics Association met as usual on September 19, 1919, the third Friday of the month, in the Chicago Chapter Red Cross Teaching Center room. Perhaps the extremely warm weather was responsible for the very small attendance of fifteen members.

The meeting was held for the purpose of reporting the American Dietetic Association Conference, held in Cincinnati, Ohio, September 8-12. The Chicago Association was very well represented at the national meeting by its president (acting as delegate), Miss Florence Smith, dietitian of Presbyterian Hospital, Miss Isabel Stewart, director of Nurses' Home, Illinois Training School; Miss Blanche Joseph, field dietitian of Michael Reese Dispensary and chairman of Social Service Section of American Dietetic Association; Miss Esther Ackerman, dietitian of Michael Reese Hospital; Miss Emelia Lutz, formerly dietitian of Columbus Hospital, and Mrs. Madeline Mehlig, director Bureau of Dietitian Service for Central Division American Red Cross.

Miss Smith gave a very full account of the most important parts of the program, aided by Miss Lutz, who related the measures of Doctor Campbell, who so ably discussed the relation of the dietitian to the physician, and by Mrs. Mehlig, who told of the message given by Miss Clara D. Noyes, director of the Red Cross Nursing Service.

The topics discussed which were of most interest were: The state registration of the dietitian and the status of the dietitian abroad; the minimum two-year course for the preparation of the dietitian had little support, as most of the Chicago dietitians are graduates of four-year college. They were also of the opinion that a distinction should be made in the title of the dietitian who is in reality a general housekeeper, rather than a food specialist.

The president was asked to appoint a committee to work with the food and market committee of the Woman's City Club, and the meeting adjourned.

October Meeting

The Chicago Dietetics Association met on October 17, 1919, in the Chicago Chapter Red Cross Teaching Center

room. Twenty-four members were present. The time was very well spent in listening to a report of Miss Anne Boller's trip to the various food clinics of the East.

Miss Boller, dietitian at the Central Free Dispensary in connection with Rush Medical College, went from the Cincinnati Meeting of the American Dietetic Association to visit dietitians and food specialists of the East.

She first told of her visit to the New Haven Dispensary, where Miss Gilbert was in charge of a clinic for undernourished children between the ages of two and six. After hearing Miss Wood at Cincinnati she was anxious to see her work, and found it was even better than it sounded. While in New York, Doctor Woodyat wired her to be sure to see the work of the medical men interested in foods, so she made a special effort to include Bellevue, Roosevelt, and Vanderbilt hospitals, and also the clinics of Doctor Emerson and Doctor Joslin.

The association was told to look for a book soon by Miss Wood on "Food Habits of Foreign People," and to send to Dr. Charles Smith at Bellevue Hospital for an exhibit ($15) on balanced diet.

Miss Boller brought back a recipe from Doctor Joslin for diabetic jelly (agar-agar) mint sauce, mineral-oil salad dressing and Turkish paste candy which she said is rolled in unscented talcum powder, mixed with saccharin. Doctor Joslin stated that he would soon have a new book ready.

The Rockefeller Foundation is no longer working on diabetes and Doctor Allen is now conducting a private sanitarium on Fifth Avenue, New York City.

A great many hospitals were using dietitians mainly as purchasing agents.

Miss Geraghty at New Haven was doing splendid work in training dietitians in a course given in cooperation with the Yale Medical faculty.

The rest of the meeting was spent on business matters. Miss Keyes, dietitian at Cook County Hospital, was elected to take the place of Miss Esther Nelson, vice president, who resigned, and Miss Emily Millikan of Wesley Memorial Hospital, was elected to take the place of Miss Margaret Holden, secretary, formerly of Henrotin Hospital, now at her home in Michigan.

The program for the coming year was discussed and the suggestion offered that the yearly program be planned and printed at least for nine months in advance. The night of meeting was changed from Friday to Wednesday, as a mid-week night was considered more favorable for good attendance.

It was suggested that the Chicago Academy of Medicine be requested to invite the Chicago Dietetics Association to hold a joint meeting with them when Dr. E. V. McCollum of Johns Hopkins speaks to them on November 21.

Suggestions for the program were: Dr. Otho F. Ball of THE MODERN HOSPITAL, on Equipment; Miss Cora C. Colburn of the University of Chicago, on Equipment; Mr. George A. Smith of the Chicago Range Company, on Equipment; Miss Elizabeth S. Warwick of Sears, Roebuck & Co., on Textile; Mr. A. G. Hodge, of Sears, Roebuck & Co., in charge of lunch room; and Dr. Allen J. Hruby of the Municipal Tuberculosis Sanitarium.

It was also planned that in the future those eating down town will eat at 6:30 P. M. at the School of Domestic Arts and Science, and thus become better acquainted with each other and their problems.

People seem not to see that their opinion of the world is also a confession of character.—Emerson.

NEWS NOTES OF DIETITIANS

Miss Louise Pollock, who has been dietitian at the St. Louis City Hospital for some time, has gone to Columbus, Ohio, as manager of a community kitchen. This service is being established at a woman's club to meet the needs of a group of small centers on the outskirts of Columbus. The residents are largely business and professional people who are trying this means of overcoming some of their difficulties. Success would seem to be assured, as one hundred and fifty people were served the first night the kitchen was opened to the public, although the dining room is equipped to accommodate but forty-eight.

Miss Maud Perry is developing the dietary department of Montreal General Hospital. This hospital is affiliated with McGill University and many members of the medical staff are anxious to do real work in dietotherapy. With this opportunity offered and with Miss Perry's experience in this form of treatment, we shall expect very soon to be getting reports of valuable work being done.

Miss Myrtle Thomas has taken charge of the cafeteria service of the New Hotel Pennsylvania, New York City. This involves the feeding of the employees of the hotel, and is being done in the nature of an experiment. We shall follow Miss Thomas' work with interest, and hope that Mr. Statler's idea will be so successfully developed that this and other hotels may be willing to give the traveling public the benefit of the services of a woman trained in proper preparation and service of food. Miss Elna Becker is assisting Miss Thomas.

Miss Verna Chapin, who has been with Dr. John R. Williams in the Metabolism Ward at Hahnemann Hospital, Rochester, N. Y., is at present with the Board of Child Welfare of Monroe County, N. Y. Miss Chapin is in the Department of Domestic Education.

Very decided changes have recently been made in the dietary department of the Presbyterian Hospital, Chicago. Miss Florence Smith, who has been dietitian in this hospital for some time, is now supervising the diets for the patients on the floors throughout the entire house. The quantitative diets are being concentrated on one floor as much as possible. The special diets are prepared in the diet kitchen under the direction of Miss Straka.

Every dietitian will be proud and happy to know of the recognition received by some of our number who went overseas. We are proud of the part they played in the great war and happy to know that their efforts were appreciated. The following received the British Medal with the citation "In recognition of meritorius service rendered the allied cause": Miss Anne Upham, United States Rubber Company, Nangatuck, Conn.; Miss Margaret Knight, 104 Fifteenth Avenue, Columbus, Ohio; Miss Edith Huesizer, Flemington, N. J.; Miss Rachael Watkins, 6227 MacPherson Avenue, St. Louis, Mo.; Miss Florence Bettman, 535 Hausberry Street, Germantown, Pa.

Miss Edna Louise Ferry died at New Haven, on October 6. Miss Ferry was a graduate of Mt. Holyoke College in 1905. Her interest in science lead to an appointment in the chemistry department where she remained for several years. She then attended Yale, specializing in physiological chemistry, and was the first woman to receive a degree of Master of Science from Yale University. This was in 1913. Upon completing her university studies she entered the research laboratories of the Connecticut Agricultural Experiment Station at New Haven, holding a position there until the time of her death. Through an unflagging energy, broad knowledge of her science, and an exceptional enthusiasm for

her work, even under difficult conditions, she succeeded in obtaining a wide recognition among students of nutrition throughout the world. Miss Ferry collaborated in numerous contributions to the scientific journals, and lately has taken a prominent part in making known to the producers of milk as well as to the consumers, the high nutritive value of this product. Important as were her professional and social activities, the influence she exerted on all who were associated with her in her daily life was quite as great. Few women have the capacity to exact such admiration among their companions as had Miss Ferry. Her boundless enthusiasm, energy, and interest in every phase of life were an inspiration to her co-workers.

Miss Eleanor Wells is doing some special work in metabolism at Post Graduate Hospital, New York City. This work is just being arranged for at the time this item is being written so we can give no definite information about it as yet.

Miss Bertha Beecher, dietitian at Christ Hospital, Cincinnati, is taking a year for study. She is spending the year in Boston.

Miss May Foley has charge of the diet kitchen and the teaching of dietetics at Massachusetts General Hospital, Boston. In a recent issue mention was made of Miss Edith Lincoln being appointed assistant dietitian at this hospital. Since that report Miss Lincoln has been in the hospital as a patient, as it was necessary for her to undergo an operation for gallstones.

Miss Alice Ferguson, University of Illinois, 1918, who has been at New Haven Hospital as a student for the last few months, expects to have charge of the dietary department of the Missouri Baptist Sanitarium, St. Louis, Mo. They have had a dietitian for only a few months quite some time ago, so Miss Ferguson's work will be in the nature of pioneer work in that institution.

Miss Anna Hunn is managing the cafeteria service of the Power's Hotel in Rochester, N. Y. Miss Hunn has had charge of the institutional work at Cornell in past years and more recently has been connected with the community laundry and other community service. Her training and experience have been such as to make her particularly well fitted to do this work. We are glad to see a movement in hotels which gives recognition to the value of a knowledge of foods in their service to the general public, and we feel sure that Miss Hunn will justify the management of Power's Hotel in introducing this plan.

There is much food for thought for one who is in touch with the number of activities which are calling for the services of the woman trained in foods, nutrition, or institutional management.

The demands for a woman with this training are growing at an alarming rate. The word alarming is used advisedly, for in almost every instance the demand is not for college training alone, but for a woman with experience and executive ability in addition to the scientific or technical training.

Very few women are ready to answer these calls, and where are they going to be found? Our schools and colleges are not ready to give the proper amount of practical and commercial training for this work. The majority of hospitals and business enterprises are neither ready nor willing, in many instances, to be practiced upon, yet we have a few women with latent ability and a genuine desire to serve food which has been properly prepared and cooked to people who must depend upon public eating places.

This is another illustration of the urgent need for a closer coordination between our schools and other large institutions. Both have a duty to perform in bringing about a form of food service which will be one of the "preventative measures" of many so-called diseases of old age—which are in reality not diseases of middle life or of old age, but merely the result of many years of injudicious living. Good food habits and efficient sanitary measures are essential in preventing these conditions and the Home Economics woman should be able to help in both.

Just when this situation is being brought to our attention so emphatically, it is most gratifying to know that some of our hospitals are taking steps to do their share to remedy the difficulty.

In the September issue of THE MODERN HOSPITAL, we had the privilege of reporting the excellent course of training offered to student dietitians by Miss Geraghty of New Haven Hospital. There are now two other hospitals in which a course of training of high standard is being offered.

Miss Helen Markley of Cooper Hospital, Camden, N. J., has made a praiseworthy effort to cooperate with some school for this purpose. Cooper Hospital has one hundred and fifty beds, and Miss Markley has control of the housekeeping department as well as the food department. She is offering six months' training to two students at present. Three months of this period is spent in the diet kitchen, and three months in menu making, marketing, meeting sales people, visiting other hospitals, learning the care of supplies, preparation and distribution of food, taking inventories, etc.

This should help very materially in fitting the college graduate to manage a dietary department of a hospital. With Philadelphia markets available and other places of educational value which may be visited, the course offered by Miss Markley gives an unusual opportunity for the unexperienced woman to get an insight into the ways of conducting a dietary department, to obtain much valuable and practical knowledge, and to become familiar with hospital technique.

Miss Ethel Pipes of Hartford Hospital, Hartford, Conn., is also planning a course of training which will help to meet the needs of the woman seeking experience. Hartford Hospital has five hundred beds, one hundred and fifty of which are for private patients. Such a hospital should be able to give a most desirable training to a student. In every instance the hospital receives as much as it gives in the training of student dietitians, if the work is properly outlined and managed, and if the work is not systematically carried through, it is no place for an inexperienced woman. Much harm might be done by passing on haphazard methods.

Returned Soldiers Believe in Variety

Disabled soldiers show a wide variety in the kinds of work they wish to undertake after the war has made a new vocation necessary for them. The various vocations to which the men have been assigned are nearly as numerous as the men receiving the re-education. They include practically every kind of work known to man. The records at the District Vocational Board at Cincinnati, Ohio, show that the most popular industry is automobiles, starting and lighting and ignition. Others have chosen clock manufacturing, artificial limb manufacturing, optical work, salesmanship, jewelry engraving, newspaper work, shoe cutting, sign writing, dentistry, and oxy-acetylene welding. The men are interested in their work, and are fast becoming experts in their chosen lines.

OCCUPATIONAL THERAPY, VOCATIONAL RE-EDUCATION AND INDUSTRIAL REHABILITATION

Conducted by DOUGLAS C. McMURTRIE, *Director Red Cross Institute for Crippled and Disabled Men* and MRS. CARL HENRY DAVIS, *Adviser in Occupational Therapy, Milwaukee-Downer College.*

OCCUPATIONAL THERAPY IN THE GENERAL HOSPITAL

Enthusiastic Support of Medical Staff Essential—Methods of Conducting Work—Types of Cases Receiving Occupational Therapy—Definite Objects to be Attained

By G. CANBY ROBINSON, M.D., Associate Physician, Barnes Hospital, St. Louis; President, Missouri Association for Occupational Therapy

The general hospital, in its relation to occupational therapy, presents a complex problem, partly on account of the elaborate organization which is necessary for its proper conduct, and partly on account of the diversity of the types of patients that enter it. A general hospital is one which admits persons suffering from practically all types of medical and surgical conditions. It admits both males and females, and usually children as well as adults. It is also a hospital which cares for persons of varying economic states, and usually consists of wards in which the professional services are rendered without cost to the patient, as well as rooms for paying—or so-called private —patients.

An important development which has recently come about in the better hospitals of this country has arisen from the impulse to render to the patient service which goes beyond the relief or cure of physical ailments. It has been generally recognized that hospital patients present social as well as medical problems, and it is frequently only by considering these two closely related problems as parts of a whole, that the treatment of an individual can reach its maximum efficiency.

Occupational therapy must take into consideration social as well as physical problems, and must have constantly as its aim the teaching of persons to fit better into their usual environment, as well as assisting them to return to their usual surroundings. Occupational therapy should approach its task with the same ideal that every general hospital should hold—that every person who passes through the hospital should come out better able to carry the burdens of life—physically, mentally and morally. Occupational therapy should, therefore, be an adjunct to those forces of the hospital dealing with the social betterment as well as the physical betterment of the patient.

The relationship which the workers in occupational therapy should hold to the various members of the hospital organization is a matter that must be clearly defined. This is perhaps the first question to be settled when occupational therapy is introduced into a general hospital.

In the first place, occupational therapy must be conducted under the direction, and with the enthusiastic support, of the medical staff. It must be used primarily as a curative measure, and should be prescribed just as are drugs, massage, hydrotherapy or dietary measures. It must, therefore, be strictly under the control of and subject to the orders of the physicians and surgeons. It is a common experience that the support of the medical men has to be won by practical demonstrations, and this remains one of the largest tasks before those who are attempting to see properly directed work take its rightful place in therapeutics. This is a problem which will be before workers in occupational therapy in general hospitals for some time to come, and careful thought and judgment must needs be given to it.

The workers in occupational therapy are naturally under regulations which the hospital administration may make, and the hospital superintendent is the one to provide quarters and facilities for the work, as well as to define restrictions. It is his duty to coordinate occupational therapy with the other activities of the hospital, and so his cooperation is highly important. As the work should be supported from hospital funds it is obvious that the hospital administration should be encouraged to see the uses of the work to the hospital as a whole as well as to the individual patient. The needs and development of the work should be discussed with the superintendent, who should participate in the formation of all plans for its pursuit. His hearty support is of great value.

The relation of the workers in occupational therapy to the nursing staff also deserves consideration. Occupational therapy and nursing have been considered subjects that are closely allied, but it is a question if much will be accomplished if the direction of work by patients is left to the nurses as part of their nursing duties. Naturally the nurse's training is valuable for the worker in occupational therapy, but these two types of work should be clearly differentiated, at least in a general hospital. Close cooperation between the nursing staff and workers in occupational therapy is necessary. Both are engaged in carrying out the orders of the medical staff, but the primary responsibility for the care of the patient must rest with the nurse, and unless cooperation exists the usefulness of occupational therapy may be seriously hampered. On the other hand, a relationship should not be established in which the worker in occupational therapy receives orders from the nurse in charge of the patients. The nurse may, however, be of definite assistance in selection of patients and in giving advice as to the type of work and special needs of patients, especially when the physician in charge of the patients fails to do so. Therefore, the success of occupational therapy may frequently depend in no small measure on the helpful coordination which may be established between the nurses and the workers in occupational therapy. The support and assistance of the director of the training school for nurses or the chief nurse are therefore very desirable as a factor in the success of occupational therapy.

The idea that occupational therapy and medical social service may be of mutual benefit has already been suggested. It is generally recognized that an important function of occupational therapy is to influence the mind as well as the body of those needing hospital care. The modern hospital attempts to reach the afflictions of the spirit as well as those of the body, and it is the duty of the social worker to diagnose and treat social maladjustment and to point a way to an improved state of social and economic health. In the pursuit of her duties she attempts to unravel the tangles of the mind and to obtain a clear idea of the psychological status of the individual. This knowledge should be put at the disposal of the worker in occupational therapy, who can often direct her

treatment toward the relief of mental ailments, and help to chase away a real or imaginary trouble by the occupation she directs. Viewed from the other side, patients often reveal, during their work or during their period of indifference to work, bits of history or ideas which may form the basis of valuable social work, and these facts ought to be discussed with the social worker. Occupational therapy should not be fused or combined with social service any more than it should with nursing. Each is a separate form of activity with separate and distinct objects in view, but each should be ready to combine with the other and to confer whenever one may help the other, and where both together may do more for the patient than each working separately.

Finally, a word may be said regarding the relation of occupational therapy to medical students. In many general hospitals senior medical students act as clinical clerks on the wards where medical teaching is conducted. The patients are usually assigned to the students as their special field of study and in order that the students may carry on some of the simpler hospital routine. The presence of medical students on a ward where occupational therapy is being conducted should always be recognized as an opportunity for the worker to stimulate an interest in occupational therapy and to demonstrate its usefulness. Medical students at the period of their hospital work are usually very impressionable and often take what they see at that time as standards for the future. They are daily taking up what is to them new ideas, and often have a keen interest in the patients assigned to them. The chance, then, of bringing before their young minds the use and advantages of occupational therapy should not be overlooked. Of course, what has been said of students applies also to interns and members of the resident staff of the hospital, but their education in occupational therapy is not so apt to be overlooked as that of undergraduate students, nor is it always so easy to accomplish.

Occupational therapy in the general hospital should include bed or bedside occupations, occupation room work and workshop. Work should be prescribed for patients as soon as they are able, in the opinion of the medical staff, to do it, and this means, of course, that work should be begun usually as soon as and often before the patient can sit up in bed. The time of work must naturally be short and the work light at first, but the sooner it is undertaken the better. Patients frequently must remain in bed for weeks, both in the medical and surgical wards, when they are able to carry on a considerable amount of properly directed work. These patients form, perhaps, the class most in need of occupation, as they are often the most depressed and discouraged, and ones for whom preoccupation and diversion will be of the greatest benefit, both mentally and physically. Therefore, bed or bedside occupation is the type especially needed in the general hospital.

In order to carry on occupations with bed patients, a central store room and office in the hospital is necessary; a place where records can be kept, where raw materials and finished products can be stored and where "finishing touches" to some of the work can be supplied by well-trained hands. It is in carrying on occupation with bed patients that the greatest need of cooperation and coordination is shown. The workers must not interfere with the visits of the doctors or their study of the patients, and must arrange their work so that it does not conflict with the duties of the nurses and orderlies. A carefully worked out plan which will fit in with the routine of the hospital, the visiting and meal hours and other necessary hospital activities, should be the first problem to be solved in undertaking ward occupations. Its success will, in a large measure, depend on the proper determination of such a plan, with which all concerned are in agreement.

The next phase of occupational therapy is conducted in occupational rooms, which should be part of the equipment of each ward of the hospital. Here patients who are up and about can congregate for work. It is not desirable as a rule to have patients leave their wards to go to the workshop in some distanct part of the hospital, as this breaks into the proper hospital discipline, and removes the patient from the precincts over which those in charge of the ward are responsible. In most general hospitals sitting rooms or dining rooms are provided as part of each ward, and may be used for occupations. It is desirable, however, that the hospitals of the future have special rooms set aside for occupations, as has already been done in some recently constructed hospitals. Architects who specialize in hospital construction should have their attention brought to the value of such a provision. It is especially desirable in surgical wards, but no ward should be considered complete without it.

Work should be conducted in the occupation rooms at certain specified hours, and patients should be allowed to enter only during the time when they are to work. These rooms should be equipped for the simple forms of handicraft work, especially those that can be pursued without much noise. They should be of sufficient size to accomodate from six to ten workers when they are part of a ward holding about forty patients, as at times as many as a quarter or even more of the patients are up and about and able to carry on occupations.

The third method of conducting occupational therapy in the general hospital is by the use of a central workshop. Here more elaborate work can be carried on and power machines can be made use of. Weaving on large looms, extensive wood work, cement work and metal work can be done, while this type of work is hardly practicable on the wards. Patients who are able to leave their wards and go to the central shop are, however, often able to leave the hospital, and in a general hospital the central workshop is of limited utility for the majority of the patients needing strictly hospital care. The central workshop, however, is of great use for the treatment of patients at the time when they can leave the hospital but are not yet ready to go back to their former occupations or to any regular work. Many patients have a period of convalescence at home when they can be cared for as out-patients in the dispensary of the hospital, and during this time the majority of them, both men and women, are better off spending the whole or a part of the day in the work-shop than they are at home, worrying about not being able to get to work or trying to go to regular work before their physical condition warrants it. Another important phase of the usefulness of the central workshop is to provide a "tryout" period for the convalescent. If the patient discharged from the hospital can be watched for a brief period by a medical man, while doing a definite amount of work under known conditions, a fairly accurate estimate of his physical efficiency can be gained, and the kind of work he should do in the future, and the time when he should undertake regular work can be determined. If a placement bureau is conducted in cooperation with the work-shop, the patient can be carried through the various phases of his hospital career, and finally put back into the outside world with his working capacity restored to its maximum and placed where his physical and mental abilities will have the best chance for further development and for success.

Occupational therapy in the general hospital should con-

sist, then, of a series of processes which take hold of the patient as soon as the physical ailment will permit. It should carry him on to as useful and happy a place in the world as can be accomplished under the circumstances.

The fact that the general hospital admits all types of cases, of both sexes and of all ages has already been mentioned. The question of what types of cases should receive occupational therapy is therefore a large one, which can be dealt with here only in general terms. One group of patients enters the general hospital for purposes of diagnosis, the proportion varying greatly with the type of hospital. These patients are usually only occasionally and incidentally in need of work as a therapeutic agent.

Another group comes to the hospital for acute surgical conditions and for acute infectious diseases. Only during convalescence, which may be short or long, can they carry on work and then often of the lightest sort. Patients recovering from acute illnesses need rest of body and mind, and should be given occupations with care and judgment, even though they desire it, and even beg for it. Preoccupation requiring but little effort of any sort is allowable, but it should not be pushed beyond this point.

A third group of patients is admitted to the general hospital with chronic infectious diseases, such as chronic infectious arthritis, commonly spoken of as chronic rheumatism, or with tuberculosis of the bones, glands, or other parts of the body. Patients of this group often require long periods of bed treatment, and suffer from ailments which are especially depressing to the spirits. In these cases occupational therapy can do much to elevate the spirits, to occupy the mind and awaken a desire to make the best out of a trying situation. When this is done, the natural processes of resistance of the body to disease are stimulated and recovery seems to be hastened.

A fourth group of patients enters the hospital with vital organs damaged by previous infections or other obscure causes. This group includes the relatively large number of patients suffering from kidney disease or with valvular and muscular heart disease. In such conditions a complete cure is practically impossible and the treatment must be directed on the one hand to restoring the function of the damaged organ as far as possible, and on the other hand at regulating the life of the individual so that the demands put upon the damaged organ do not exceed the ability of that organ to functionate. It is in this type of patients especially that a retraining to live is essential, a process in which occupational therapy can play a very useful part. It is in these cases especially that the central work-shop and the placement bureau can be most successfully employed.

A fifth group of patients is found in the general hospital suffering from conditions falling into the domain of orthopedic surgery or suffering from fractures and bone injuries. Here, of course, occupations may play an important part in the restoration of motion and in regaining of muscular power. It is especially for these cases that a knowledge of kinesiology and some understanding of anatomy is necessary for the proper use of occupational therapy.

A sixth group of cases which may be especially mentioned is that composed of patients suffering from functional nervous disorders. Patients belonging to this group are to be found in every type of hospital, and they present symptoms simulating all types of disease. In fact functional disturbances of the nervous system so frequently accompany all forms of chronic illness, that they may be said to form part of the general picture of disease. It is to this group of patients that occupational therapy comes as a method of great service. Of course the use of occupations in this group of patients is not new, but its introduction into the general hospital will mean that very many persons who formerly would have been deprived of its benefit can now have it. It is in this large group of so-called functional nervous disorders that occupational therapy has its greatest field of usefulness, and properly directed and regulated work brings to these patients a new chance. It is an important addition to the therapeutic equipment in the treatment of neurasthenia, psychasthenia and the allied states of nervous disorders.

Occupational therapy should attempt to attain several definite objects in the general hospital, objects which have to do not only with the individual patient, but also with the hospital as a whole. In the first place it should be directed at the special therapeutic problem as seen by the physician and surgeon. It should be the means of exercising damaged joints and weakened muscles, and should also furnish gentle and progressive exercise for the body as a whole. This often can be done without the realization of the patient, but it is a matter that should be constantly under consideration. Fatigue beyond a beneficial degree must be avoided. The physical effects of occupational therapy must hold first place and must be strictly dealt with as an individual problem in each case.

In the second place occupational therapy should aim to improve the mental condition of the patient. The worker should attempt to make each patient a happier patient, a more hopeful patient, a more cheerful patient and a more ambitious patient. It needs no arguments or examples to show that an occupation in which a person is interested accomplishes these things. But the degree of success will depend on interesting the patient and the influence which the personality of the worker exerts. Medical men are ready to admit that recovery from disease is hastened by the improved state of the mind and spirit, and so an indirect therapeutic gain may be counted as a definite object of occupational therapy. A change of mental attitude or an elevation of spirits may at times be all that is necessary to convert a chronic invalid to a state of perfect health when there is only a functional nervous ailment or neurosis to blame, but no matter what the underlying cause, the patient is benefited by a stimulation of the spirit, and his lot is made easier thereby.

Another object of occupational therapy in the general hospital should be the improvement of ward or hospital morale. Workers should enter the hospital with the avowed intention of making it a brighter, more cheerful and more comfortable place for the patients. They should consider it as one of their duties to make the patients feel a sense of gratitude for what the hospital and its staff are doing for them and should awaken a loyalty and sense of pride in the hospital that is caring for them. The effect that occupational therapy has had on the attitude of patients toward the hospital has more than once been a means of awakening the interest and support of hospital superintendents, and is capable of effecting much that is positive in the usefulness of the hospital.

The selection of the type of work suitable for types of patients has been omitted, as generally speaking, it is not a problem peculiar to the general hospital, nor can rules be laid down to meet the varied circumstances which are met. Judgment and common sense must be brought to bear on each case as it is presented. There is one phase of this question which is, however, perhaps not infrequently to be considered by the worker in the general hospital, where patients come from and return to the world of work in an ever-flowing stream. This phase of selection of work is that relating to the former occupation and especially to the future work of the patient. Whenever

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Page 541

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H. K. MULFORD COMPANY

Manufacturing and Biological Chemists

Philadelphia, U. S. A.

A Boon To The Convalescent

OVALTINE—an irresistible temptor to the jaded appetite of the convalescent, diet wearied. The delicately blended flavor of its malt and cocoa has a taste appeal that speeds recovery.

But palatability is only one of OVALTINE'S long list of merits.

Made solely of milk, eggs, malt and cocoa, it contains every nutritive element, properly balanced, essential for the welfare of body, brain and nerves.

Highly nourishing, easily digested, quickly prepared, it pleases physician, patient and nurse alike.

Send For Sample

The Wander Company

Dept. C, 37 South Wabash Avenue
CHICAGO, ILL.

Works: Berne, Switzerland;
London, England;
Villa Park, Ill.

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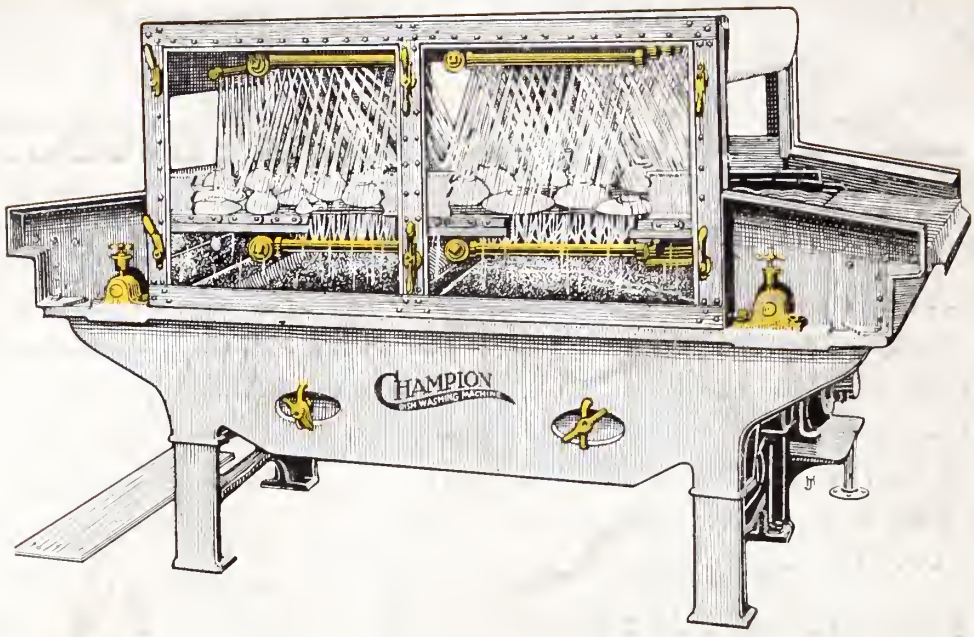
Page 696

OVALTINE

A Building Food - A Super Nourishment



eight of these machines

were sold the United States Government, for its Naval Base at Coddington Point, Newport, R. I. Eight Champion Dishwashing Machines, and you can gamble that they were not bought without record of past performance and tests of demonstration.

The picture gives you an idea of its appearance. It looks like one of the war tanks and is possessed of the same durability and efficiency. It's made to wash dishes, thoroughly and quickly, to save time and labor, and to prevent breakage. That it does all these and does them well, can be proven by hundreds of satisfied users. The eight the Navy just bought were made by

THE HAMILTON-LOW CO
CHAMPION AND
VORTEX DISH WASHING MACHINES
145 EAST 42ND ST.-NEW YORK CITY, N.Y.

SOLD THROUGH

"Everything at one place."

L. BARTH & SON

Since 1868.

Complete Hotel & Rest. Equipment
Cooper Square

Telephone
Spring 7500

Soda Fountains & Bakers' Supplies.
New York City.

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NEW YORK CITY

The MODERN HOSPITAL

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Prevent Fall Hay Fever

Immunize Early Against Hay Fever

Reports of competent observers have established the value of Pollen Extracts in the prevention and treatment of Hay Fever.

Mulford Hay Fever Pollen Extract (Ragweed) contains protein nitrogen obtained from the pollen of Ragweed, which is the cause of most Hay Fever cases occurring in the Fall.

Mulford Hay Fever Pollen Extract (Fall) contains protein nitrogen obtained from the pollens of Ragweed, Golden Rod and Corn. Some individuals seem to require immunization against all three of these pollens.

Accurate Standardization, as to content of protein nitrogen, is an important feature of Mulford Hay Fever Pollen Extracts. They are supplied as follows:

No. 0.—In packages of four sterile syringes, A, B, C, D strength
No. 4.—In 20-mil vials, each mil strength of Syringe D
No. 9.—In 5-mil vials, each mil strength of Syringe D
No. 11.—Single syringe, D strength
No. 12.—Single syringe, E strength
No. 14.—Single syringe, F strength

Syringe A contains 0.0025 mg. pollen protein nitrogen
Syringe B contains 0.005 mg. pollen protein nitrogen
Syringe C contains 0.01 mg. pollen protein nitrogen
Syringe D contains 0.02 mg. pollen protein nitrogen
Syringe E contains 0.04 mg. pollen protein nitrogen
Syringe F contains 0.08 mg. pollen protein nitrogen

YB
Page 541

When ordering Pollen Extracts, always specify "Ragweed" or "Fall," as may be desired.

For immunizing against Hay Fever, the first dose of Pollen Extract (Syringe A) should be given at least 30 days before expected attack, followed by Syringes B, C and D, at 5-day intervals. A dose equivalent to Syringe D should then be used at weekly intervals during the entire usual period of attack.

Literature Sent Free Upon Request

MULFORD FOR THE CONSERVATION OF LIFE LABORATORIES

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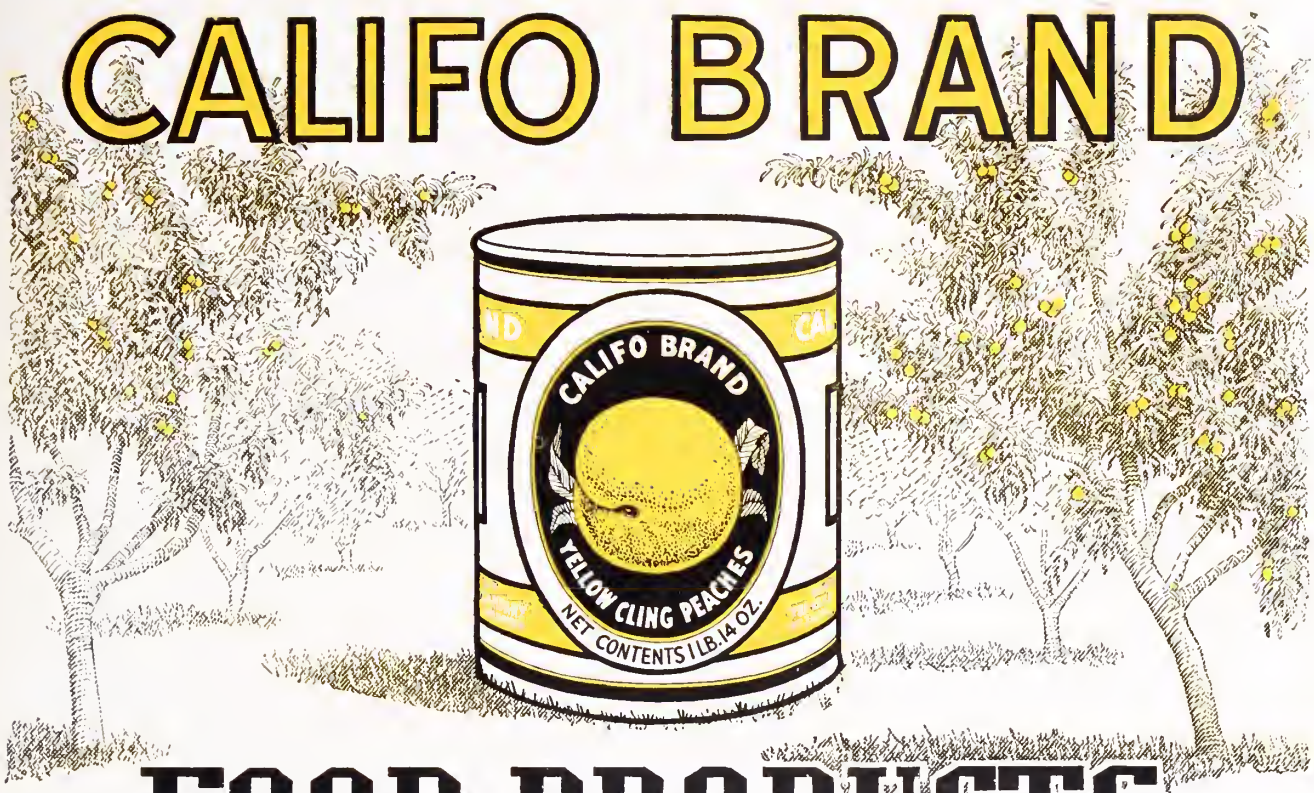
H. K. MULFORD COMPANY

Manufacturing and Biological Chemists

Philadelphia, U. S. A.

CALIFO BRAND



FOOD PRODUCTS

Simplified Buying

PROGRESSIVE Purchasing Departments for Institutions, Schools, Hospitals and Industrial Cafeterias are turning in ever increasing numbers to The Coast Products Company for supplies in canned foods. Instead of buying a miscellaneous assortment from many sources, they save time and motion, and secure practically their entire needs under the great CALIFO Seal of Quality. CALIFO Foods are already selected for their special requirements. They are grown, graded and packed by experts—so uniformly delicious and dependable that buyers need look no farther for superior food.

Simplify your purchasing of Fruits, Berries, Asparagus, Pineapple, Preserves, Jams, Vegetables, Olives, Dried Fruits, Sea Foods, etc., by centralizing your orders under the CALIFO guarantee of complete satisfaction. We can supply fully and economically the needs of large and small buyers, through our nearest branch warehouse, freight charges prepaid.

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Page 341

Write for "CALIFO Food Chart and Price List"

The Coast Products Company

8th and Spruce Streets, St. Louis

DISTRIBUTING WAREHOUSES:

Rochester **Chicago** **Indianapolis** **Kansas City** **Minneapolis** **Cincinnati**
Omaha **Des Moines** **Dallas**

FREIGHT PAID to Any Railroad Station in the U. S. A.

Flavor Is the Basis of All Food

Experienced dietitians recognize Flavoring Extracts as first aids to convalescence—making nourishing foods and drinks more palatable, which means stimulation of the flow of gastric juices.

Since, in the feeding of the sick and convalescent, flavor is such an important factor, it follows that a hospital especially should use only the purest and strongest flavors. The best is always the most economical when the insignificant cost per pound of food flavored is considered.

SAUER'S
PURE FLAVORING EXTRACTS

are made from the choicest materials obtainable in a modern and sanitary plant with every possible care taken in their manufacture. Prepared in glass lined tanks and filled by vacuum into sterilized bottles.

Sauer's Extracts have won seventeen highest awards and medals at various American and European Expositions for

Purity, Strength and Fine Flavor

Uniform high quality has made Sauer's the largest selling brand in the United States.

Ask us for price list.

The C. F. Sauer Company

Richmond, Virginia

The MODERN HOSPITAL

Vol. XIII *September 1919* No. 3

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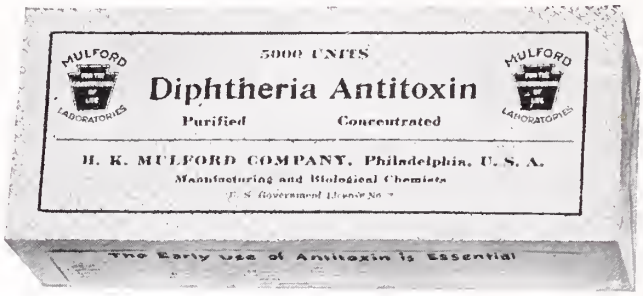
Reduced Prices

on

Mulford Diphtheria Antitoxin



Mulford Purified and Concentrated Diphtheria Antitoxin, each dose in aseptic glass syringe, ready for immediate use, is now sold at the following prices:

1000 units	$0.75
3000 units	2.00
5000 units	3.00
10,000 units	5.00

The first Diphtheria Antitoxin made commercially in this country bore the Mulford label and the rich experience gained in 25 years of antitoxin production is reflected in the superior quality of the Mulford antitoxin of today.

Potency—high
Total solids—low
Density—same as the blood
Dosage and sterility guaranteed

The potency and sterility are assured by duplicate sets of tests, conducted separately and independently, then compared and passed on by a third expert.

To insure receiving this highest grade antitoxin at the new prices, always specify **"Mulford"** on your orders and prescriptions.

The best druggist in your town or district is usually a Mulford distributor.

MULFORD FOR THE CONSERVATION OF LIFE LABORATORIES

H. K. Mulford Company

Manufacturing and Biological Chemists

Philadelphia, U. S. A.

40115

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DIFFUSELITE PAINTS.

THE J. G. WILSON CORPORATION

DIFFUSELITE DEPARTMENT

New York — DIFFUSELITE WHITE — Norfolk, Va.

SPECIALLY PREPARED LIGHT-REFLECTING PAINTS

A scientific combination of vehicles and pigments producing coatings with maximum and permanent coefficient of reflection. All tints treated for light quality as well as light quantity.

Specifications for Painting Reflecting Surfaces Blue

WOODWORK

First Coat—Add one pint of good varnish to every gallon of Diffuselite White Paint.
Second Coat—Straight Diffuselite White Paint.
Third Coat—Diffuselite Gloss Enamel and Diffuselite White Paint, half and half.
Fourth Coat—Diffuselite Flat Enamel, flowed on.

PLASTER (new) DIFFUSELITE WHITE

First Coat—Diffuselite White Paint and a good impervious size in the proportion of one-quarter paint to three-quarter size.
Second Coat—Straight Diffuselite White Paint.
Third Coat—Straight Diffuselite White Paint.

PLASTER (new) DIFFUSELITE COLORS

First Coat—Diffuselite Paint and a good impervious size in the proportion of one-quarter paint to three-quarter size.
Second Coat—Diffuselite Paint.
Third Coat—Diffuselite Paint.

PLASTER (old or already painted) DIFFUSELITE PAINTS

First Coat—Add one pint of boiled Linseed Oil to one gallon of Diffuselite Paint.
or Diffuselite Paint and a good impervious size in the proportion of half and half.
Second Coat—Diffuselite Paint.
Third Coat—(If Necessary)—Diffuselite Paint.

Fine stippling furnishes the best results. Walls need not necessarily be stippled, however.
Under no circumstances add any vehicle to these paints. If paint becomes too thick toward end of the can, add straight Spirits of Turpentine only.

Edelweiss Fruits—Notable for Quality!

UNLIKE the home canner, whose fruit for canning is picked green and shipped long distances, we pack the fresh-picked fruit directly into Edelweiss cans.

The result is that Edelweiss canned goods reveal the full flavor and lusciousness of the ripe fruit—Washington Loganberries, California apricots, peaches, plums, pears, Hawaiian pineapples, etc.

Our Edelweiss brand is the mark of selected fruits, promptly and skilfully packed in rich syrup. Specify Edelweiss and you are assured of fruit quality, purity and healthfulness that surpass the strictest pure food requirements.

Those who attend the convention of the American Hospital Association and American Dietetic Association at Cincinnati, September 8-12, will find the display of Edelweiss Canned Fruits and Vegetables, Coffees, Teas and other products full of helpful suggestions to all who provide for institutional tables.

But even our large display in Booths Nos. 9 and 10, mezzanine lobby, can scarcely suggest the many lines, the quality standards, and the splendid service for which this great business stands. We should like to move our six-story plant down to Cincinnati for this occasion.

We cordially invite all our friends, when passing through Chicago, to visit the home of Edelweiss Food Products, and let us show you with what care, intelligence and thoroughness we serve you.

JOHN SEXTON & COMPANY

Edelweiss Products

CHICAGO

THE HOME OF EDELWEISS PRODUCTS

The MODERN HOSPITAL

Vol. XIII October 1919 No. 4

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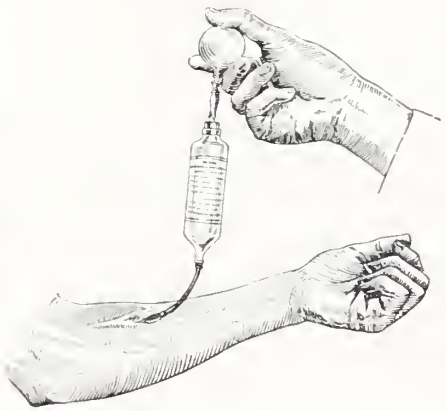
Fight the Pneumonias

Mulford Antipneumococcic Serums

(Polyvalent and Monovalent, Type I), as used so successfully in the U. S. Army and Navy, are invaluable in the treatment of pneumococcus pneumonias.

The Mulford polyvalent serum is fully equivalent to the monovalent serum in its protective power against Type I infections, and, in addition, contains protective antibodies against Types II and III.

It is considered advisable to administer polyvalent serum promptly in all cases of pneumonia where it is impossible to obtain immediate type diagnosis.



Mulford Antistreptococcic Serum

may be used to advantage conjointly with Antipneumococcic Serum for treating that large number of lobar pneumonias in which the streptococcus is a complicating factor. This serum includes antibodies against streptococcus hemolyticus and other strains of streptococcus.

Mulford Pneumo-Strepto-Serum

The difficulties and inconvenience of separate injections of Antipneumococcic Serum and Antistreptococcic Serum may be avoided by using Mulford Pneumo-Strepto-Serum, which contains antibodies against all the various strains of pneumococci and streptococci employed in preparing the specific serums.

An injection of 100 mils Pneumo-Strepto-Serum is equivalent to 100 mils Antipneumococcic Serum and 100 mils Antistreptococcic Serum.

All the above serums are supplied in 50-mil packages with the Mulford perfected intravenous apparatus

MULFORD FOR THE CONSERVATION OF LIFE LABORATORIES

H. K. MULFORD COMPANY

Biological and Manufacturing Chemists

Philadelphia, U. S. A.

4-831

To those experimenters in the electrical field who through their vision and tireless application harnessed the forces of electricity we pay daily tribute by using this unseen power to drive K&H elevators with a gliding smoothness and at a speed which is always under perfect control.

So simple and yet so strong—so powerful and yet so easily controlled are K&H elevators that architects and engineers show their appreciation of our efforts by depending upon the responsibility of this organization.

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KAESTNER & HECHT CO.

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After the amputation — What?

The patient on the road to recovery asks, "Can I walk again?"
"Yes, if you get a

WINKLEY ARTIFICIAL LEG"

Manufacturers of the latest improved patent adjustable Double Slip Socket.

Warranted not to chafe the stump even in the hottest weather.

Send for our large new illustrated catalog.

Largest manufactory of Artificial Limbs in the world.

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Page 715

THE WINKLEY ARTIFICIAL LIMB CO.

MINNEAPOLIS, MINN., U. S. A.

The MODERN HOSPITAL

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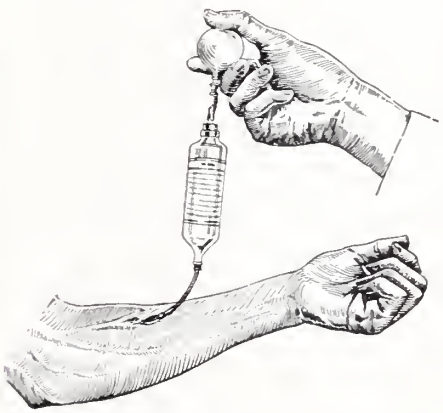

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MULFORD FOR THE CONSERVATION OF LIFE LABORATORIES

H. K. MULFORD COMPANY

Biological and Manufacturing Chemists

Philadelphia, U. S. A.

40834

THE DIFFUSELITE SYSTEM

What Is It?

Necessary installations which in combination furnish proper lighting, both natural and artificial. These installations depend upon one another and must be properly made, and properly coördinated, in order to produce results.

The Diffuselite Department directs the manufacturing of the several commodities used, so that when installed they coördinate as the Diffuselite System.

What Are the Necessary Installations?

Shading devices for windows which regulate light without loss or interference with ventilation.

Proper paints for ceiling and walls. Ceiling and wall surfaces, as sources of light-receiving and light-reflecting, are of the greatest importance.

Artificial lighting fixtures and lamps which suit conditions and furnish a proper quantity and quality of light.

Glazing of windows so that an additional quantity of light may be passed without glare or specular reflection.

Proper orientation of windows.

THE DIFFUSELITE DEPT.

The J.G. WILSON CORPORATION

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BRANCHES IN PRINCIPAL CITIES

FACTORY–NORFOLK, VA.

SOLE MANUFACTURERS OF DIFFUSELITE BLINDS AND DIFFUSELITE PAINTS

Modern building service is as dependent on its elevators as are the elevators upon their cables. These cables inherit the inventive efforts that have been applied to the manufacture of ropes from the time of the primitive man who first discovered that ropes could be made from fibres, skins and reeds.

In massive stone and latticed steel, columned front and sculptured cornice, the great building is no better than its elevator service.

That edifice is complete and perfect as skilled hands can make it which centers its service about swift and tireless *K&H* elevators—machines which operate with the smoothness and silence which is characteristic of human organs.

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KAESTNER & HECHT CO.

ELECTRIC ELEVATOR BUILDERS

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The MODERN HOSPITAL

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Influenza

Prevention and Treatment

Mixed bacterial vaccines for the prevention and treatment of common colds and influenza were first produced commercially in the United States by the Mulford Laboratories, in 1910. Since its introduction, the structural formula of **Mulford Influenza Serobacterin Mixed** has been maintained unchanged.

During the influenza epidemic of 1918, additional strains obtained from virulent cases in different parts of the country were added. These strains include:

Influenza Bacillus (Pfeiffer).
Streptococcus (hemolytic and viridans).
Staphylococcus (aureus and albus).
Pneumococcus (types I, II, III, IV).
Micrococcus catarrhalis.
Bacillus Friedlander.

The experience of physicians who used **Mulford Influenza Serobacterin Mixed** in industrial institutions and private practice confirmed their belief in its efficiency, both as a prophylactic and therapeutic agent.

Section of Incubator for growing bacteria.

Influenza Serobacterin Mixed is supplied as follows:

- **M 109-0**—4-syringe . . 1 immunization.
- **M 109-9**—5-mils . . . . 2 immunizations.
- **M 109-4**—20-mils . . . . 8 immunizations.

As immunity is only relative, there is an advantage in four injections, beginning with a small initial dose, progressively increased, thus affording a more complete and lasting immunity.

Always specify "Mulford" on your orders and prescriptions

H. K. Mulford Company

Manufacturing and Biological Chemists

Philadelphia, U. S. A.

41309

In the years preceding the Christian era, at certain months of the year the river Nile receded into a narrow channel.

The inventive Egyptians rigged up a device to draw a steady flow of water from the river and irrigate the land.

This device is perhaps the predecessor of the worm type gearing now used to transmit power so smoothly and effectively in one type of K&H electric engines.

This gearing is one of the factors which accounts in a large measure for the smooth silent glide of the elevators which we design.

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Gumpert's Chocolate Pudding

A finer, more wholesome dessert and as pure as it is delicious; a dessert with a taste as delicate as the blossoms' fragrance; a product of Nature's best in its highest form.

ECONOMICAL and NUTRITIOUS

RECOMMENDED BY LEADING DIETITIANS

Gumpert's attains to the highest standards set for such products by America's leading hospitals and similar institutions. The dietitians of these institutions find Gumpert's entirely satisfactory from the standpoint of caloric contents, purity and inviting wholesomeness.

Jointly with the high qualities of Gumpert's Chocolate Pudding, please consider its very definite economy, quality considered. Every pound covered by our unqualified warranty of money back and no charge for portions consumed. On that basis we recommend it for your trial.

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Brooklyn, N.Y.

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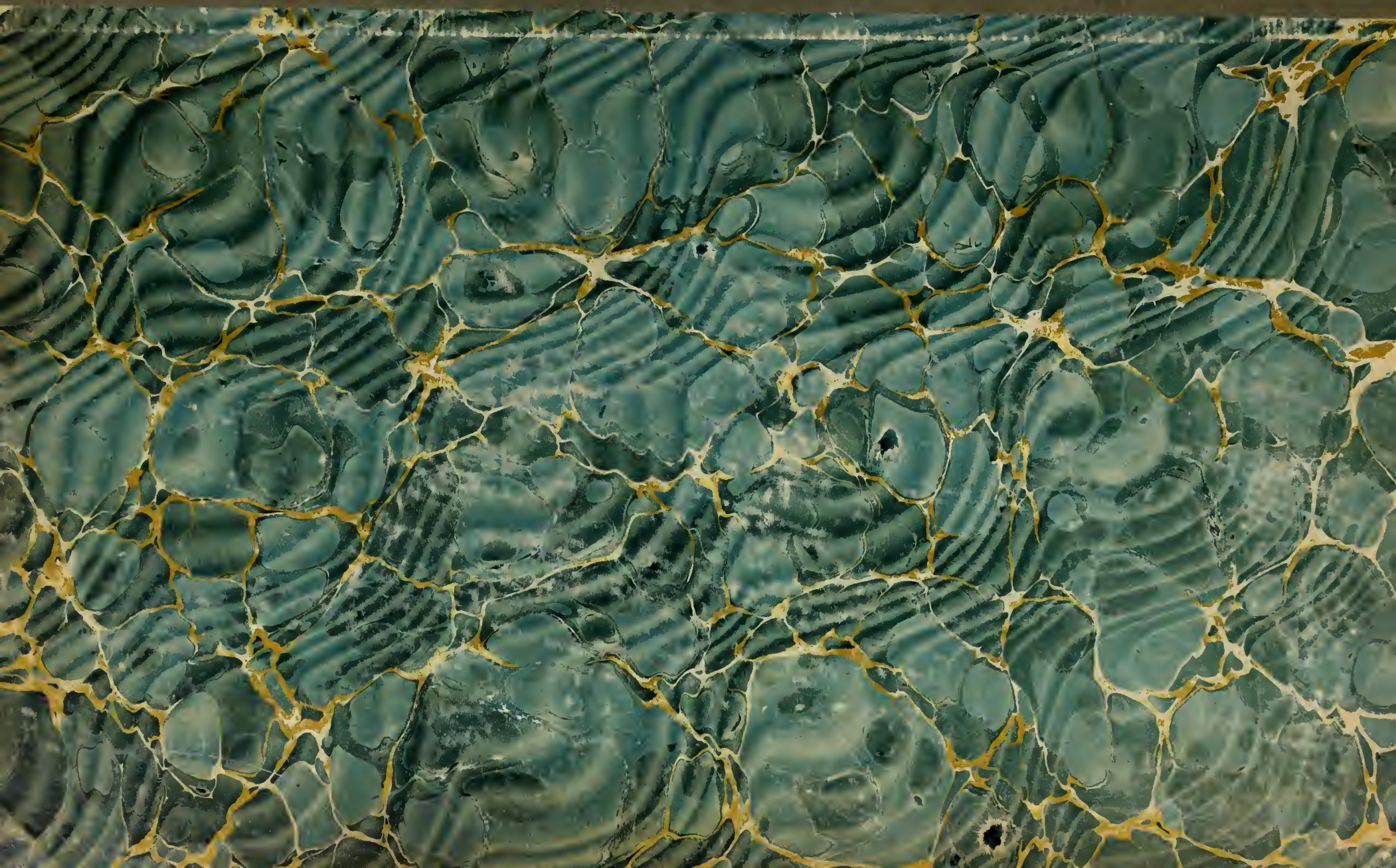
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Chicago, Ill.